

THE NATIONAL SYSTEM OF EDUCATION IN MEXICO

BY
CAMERON DUNCAN EBAUGH

A DISSERTATION

Submitted to the Board of University Studies of The Johns Hopkins University in
conformity with the requirements for the degree of Doctor of Philosophy

APRIL 1931

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To My Mother
Mary Schofield Ebaugh

ACKNOWLEDGMENTS

Owing to the immediacy of the activities with which the present work is primarily concerned, the sources available for study were limited almost entirely to the official bulletins and publications of the Mexican Federal Department of Public Education. Histories and essays dealing with the political, social, and economic aspects of the existing Mexican situation have been drawn upon for the background and for the aims of the Revolutionary Party since the fall of the Porfirio Díaz régime. The numerous publications of the Department of Public Education, however, have constituted the principal source for the data concerning the educational program herein described and evaluated. Presenting, as they do, the complete history of the movement launched by the Federal Government in Mexico—from 1921 to the present (1930)—these bulletins, books, pamphlets, and sundry publications provide the most authentic record of the lofty ideals and the remarkable achievements which have attended the revolutionary governments from the beginning.

Hearty acknowledgment is due to Professors Moisés Sáenz, former Under-Secretary of Public Education, and Rafael Ramírez, Head of the Department of Rural Schools, for their exceeding kindness and valuable assistance rendered through providing me with a practically complete set of the above-mentioned publications. Professor Sáenz also supplied the writer with an excellent bibliography for the background of the study, and Professor Ramírez took it upon himself to give further aid by procuring important materials from his own and other departments of the federal government.

To Dr. Florence E. Bamberger, Professor of Education in charge of the School of Higher Studies in Education, The Johns Hopkins University, is due the most sincere and profound appreciation for her untiring interest, her invaluable criticisms and suggestions, and her constant inspiration and

encouragement throughout the development of the study. It has been a pleasure and a privilege to have Dr. Bamberger's cooperation.

Dr. I. L. Kandel of Teachers College, Columbia University, read the manuscript with painstaking thoroughness and I am deeply indebted to him for his cogent marginal notes and his lucid and significant suggestions regarding both form and content.

Indebtedness is also acknowledged to the Department of Education of The Johns Hopkins University—particularly to Dr. Bamberger and Dr. E. Earle Franklin—for innumerable suggestions and criticisms of a most constructive character.

Further acknowledgment is due to the staff of The Johns Hopkins "Education Library" and to Mr. J. F. Abel, Chief of the Division of Foreign School Systems, Office of Education, Washington, D. C., for courteous assistance in locating sources.

For her unstinted moral support during the two years occupied in the accumulation of the materials and the writing of the dissertation, and for her patient and scrupulous care in the typing of the manuscript, I am deeply obligated to my wife, Edith Escott Ebaugh.

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CHAPTER I

INTRODUCTION

Mexico is a land of great geographical variations, contrasts, and extremes. In the center an enormous plateau rises high above the surrounding regions and boasts an altitude of approximately 7000 feet above sea level. Compared with the temperate climate of this central elevation, the coastlands to the east and west and the tapering territory to the south are marked by all the characteristics of the torrid zone. In the north are vast desert stretches similar to our own Southwest, gradually mounting to the level of the plateau. On the mountain peaks, perennial snow; in the valleys, untrodden jungles; in some regions, a sad deficiency of rainfall; in others, an equally troublesome superabundance. And these extraordinary inequalities of topography and climate bring with them consequent problems of food production and health.

Mexico is likewise a land of poor communication. Despite the 13,000 miles of railways, numerous towns and villages are situated far from the stations and even from the railroad lines themselves. As a general rule, highways are wretched, and during many periods of the year impassable because of the heavy rainfall. Scores of towns and villages are not connected with any other center of population. Two weeks on horseback is often required in order to reach certain inland settlements. A trip from Mexico City to the capital of the State of Chiapas involves two days of travel in train and four days on horseback. It is far easier and quicker for the Yucatecan to journey to New York, for instance, than to the capital of his country.

Although the foregoing facts concerning topography, climate, and communication offer some degree of reason for the obvious backwardness of the Mexican nation, there are still other factors which have militated most powerfully against the growth and development of the people. For the

better understanding of conditions as they exist today, a brief treatment of the causes underlying them is necessary.

At the coming of the Spaniards, New Spain, as Mexico was then termed, was peopled with "mutually hostile tribes whose primitive relationship had been lost sight of in the contest for possession of fertile lands and the rivalries of family and tribal groups competing for political power."¹ The great culture and advanced civilization of the early Maya race had already fallen away, and the power of the Aztecs who succeeded them was steadily declining. The masses of the people were in conditions of slavery, and slavery under the Mayas, the Toltecs, and the Aztecs was followed by slavery under the Spaniard.

Little is known regarding the health of the natives before the conquest, but with the white man came all his physical ills: smallpox, tuberculosis, syphilis, yellow fever, and numberless others. In addition to this, there can be no doubt that "living in houses, larger consumption of food, unrestrained use of intoxicants, and arduous toil in fields and mines"² had their effect on the constitution of the out-of-door-loving Indian. It is affirmed that half the children die before their eighth year.

The Catholic religion was imposed on the people, but was not understood. Marriage was not a strong institution even in Spain and it will not be supposed that the Spanish soldier acquired a more discriminating, or a less immoral code of conduct while on his avowed conquests. Halfbreed foundlings were the rule rather than the exception, from the earliest days of the colony, and were looked upon as markedly inferior in all ways to all other groups. According to Priestley,³ "illegitimate births still run in Spanish America from 40 to 60 per cent. . . . The foreign elements which amalgamate readily with Mexicans are notably Spanish and German, to less extent the French and English. On better social levels American admixture is infrequent."

¹ Sáenz, M., and Priestley, H. I. *Some Mexican Problems*, University of Chicago Press, 1926, p. 100.

² Op. cit., p. 97.

³ Op. cit., p. 102.

The significant result of this mixture of the races has been the evolution of the mestizos, who, being the product of Indians and whites, have absorbed all of the contributing factors and thus possess the outstanding characteristics of both. From the European came what there is of individuality, of logic, of alertness of mind, of the spirit of dominance; from the Indian, fear, suspicion, hatred of the white man, inferiority. The product could not help but be inconsistent, and yet it is this new race upon whom the responsibility of building up the Mexican Republic must rest.

After four centuries of foreign domination, 400 years in which agriculture, mining, commerce, and industry were almost entirely in the control of Europeans, and the desirable positions in army, church, and government were denied the natives either socially or legally, the mestizos have gained the upper hand and are struggling to overcome the serious handicaps which their long toilsome subjection has bred in them. The Spanish conquerors had stifled the beginnings of local and communal self-government among the Indians and had ruled with iron hand until well into the first quarter of the nineteenth century, and independence brought little or no material benefit to the great mass of Mexicans. As Ernest Gruening says in his *Emerging Mexico*,⁴ "Most of the old oppressions continued unabated—some were later intensified." Each successful political party that came into power immediately set about gathering power and wealth at the expense of the defeated opponent and gave rise in this manner to further dissatisfaction and consequent revolution. The most prominent motive of almost every man⁵ who came to power in Mexico up to the end of the Díaz régime was personal ambition. Answering the question *What's the Matter with Mexico?*,⁶ H. K. Norton points out that there may have been a genuine desire to improve the conditions of the people, but that it never was permitted to influence the primary motive of personal ambition to the point of subordinating it to a course

⁴ *The Nation*, Vol. 120, No. 3127, June 10, 1925, p. 649.

⁵ Benito Juárez, *Mexico's Lincoln*, is a notable exception to this statement.

⁶ *World's Work*, Vol. 56, No. 6, September, 1928, p. 623.

of cooperation with companions in arms who professed the same aims and purposes. The men at the head of the government changed, but the vast masses continued in their servitude, apparently "knowing nothing and caring nothing, except in a few cities, of what passes in the sphere of government."⁷

During the presidency of the Indian patriot, Benito Juárez, an effort was made to give Mexico a constitutional government, a government for the people. With his Land Reform laws, the separation of the Church and the State, the amortization of Church property amounting to about three-fourths of the national wealth,⁸ and the establishment of government schools for the education of the masses, Juárez proved himself a competent leader and a true friend of the people. Unfortunately his rule was cut short by his untimely death, and anarchy immediately returned to the country. In the last quarter of the nineteenth century, Porfirio Díaz brought material prosperity and a semblance of order to Mexico. Due to years of uninterrupted peace, railway expansion, and the suppression of the *alcabala* or tax on sales, capital flowed in and increased national production, developed commerce and industries, and to some extent increased wages.⁹ Factories grew by thousands—sugar mills, smelters, cotton and woolen mills, chemical works, breweries. The banking system was thoroughly organized, harbors were constructed at Vera Cruz, Puerto Mexico, and Salina Cruz; a drainage system was completed for Mexico City; and scores of modern public buildings were erected in the capital and in important towns.

Nothing was done during the Díaz régime, however, to actually benefit the masses and it has since come to be regarded as a period in which legitimate national aspirations were suppressed and the Mexican people exploited for the benefit of domestic and foreign capitalists.¹⁰ Díaz surrounded himself with a group of business and professional men who sought material wealth and power for themselves regardless of the

⁷ Bryce, James, *Modern Democracies*, Macmillan, 1921, p. 189.

⁸ Boletín de la Secretaría de Educación Pública, Vol. 1, No. 3, Mexico, D. F., 1923, p. 654.

⁹ Priestley, H. I., *The Mexican Nation, a History*, Macmillan, 1923, p. 391.

¹⁰ Norton, H. K., *What's the Matter with Mexico?* in *The World's Work*, Vol. LVI, No. 5, September, 1928, p. 528.

condition of the masses. These were treated as mere tools, the means to the desired end. Indians and mestizos alike—over 80 per cent of the population—were considered incapable of learning and unfit for the rights and opportunities of civilization. Consequently they were kept in a state of supine ignorance and poverty. The schools established for the people during Juárez's administration became, under Díaz, institutions for the education of the élite, the wealthy, who, along with the privileged foreigners, enjoyed the usufruct of the national wealth. In place of the formerly accepted philosophy of Auguste Comte, epitomized in the three words Love, Order, and Progress, materialism became the guiding principle in the teachings of these schools. The quick and ruthless acquisition of power and wealth was the ambition of the governing class. Aided and abetted by the government through land grants and business concessions, the privileged minority of domestic and foreign favorites vied with one another in the exploitation of the masses. And when the dispossessed country-folk turned to the government for protection, they were directed to seek justice in the courts, where the lawyers and magistrates soon deprived them of their remaining resources.¹¹ Little was then left for them but to become humble vassals of the new lords of their land.

In his *Modern Democracies*,¹² Lord Bryce states that in Mexico, as in most parts of Spanish America, "the land (except where occupied by Indians in a quasi-tribal condition) has been since the Conquest in the hands of large proprietors, who work it by native labor. The Indian 'peon' is a sort of serf, ill-paid, and often ill-treated, discontented with his lot, but not knowing how to improve it." Another writer, José Vasconcelos, an eminent pioneer in the modern movement for uplifting the Mexican masses, Ex-Minister of Education in Mexico and unsuccessful rival of General Ortiz Rubio for the presidency in 1929, gives the following description of his country before the revolution:¹³ "a country one-fourth as

¹¹ *Boletín de la Secretaría de Educación Pública*, Vol. 1, No. 3, Mexico, D. F., 1923, p. 661.

¹² *Op. cit.*, p. 203.

¹³ Lecture under auspices of International Chautauqua Assn., Washington, D. C., 1922. Mimeographed copy in Office of Education Library, Washington, D. C.

large as the United States, inhabited by 15,000,000 people, among them 12,000,000 illiterate, poor, under subjection, all of them controlled politically by one man and economically by one hundred families." According to him, it was impossible for anyone outside of the chosen few to buy land or property, to conduct a business, or to demand fair wages for his services. Exploitation and tyranny were unrestrained.

In the cities and towns, property ownership was practically impossible for industrial workers, all land and improvements being zealously controlled by the governing class and the capitalists. Educational opportunities were likewise beyond the reach of any except the wealthy, and as a safeguard against combined effort on the part of the workers to improve their lot, the right of organization was steadfastly denied them.

Commenting on Mexican social and labor conditions prior to the revolution, Roberto Haberman, one of the foremost labor leaders in Mexico, made the following statement:¹⁴ "Slavery is not exactly the correct term to describe the situation in which the Mexican workers found themselves—they were peons. Peonage is worse than slavery. Slaves cost their masters money, and some provision is made for them when work is slack. Under the Mexican system, peons represented no capital investment. In case they were unable to pay, debtors had to work out their debts for those to whom they were indebted, and Mexican masters took very great care to see that they never completed their work. They were paid something for their labors, but never in cash. They were given some sort of credit slip which was good at the Company Store, attached to the hacienda." This hacienda settlement was enclosed within a wall, gate of which was opened at sunrise and closed at sundown. In most cases churches or chapels were within hearing distance, and the workers were hurried off to their toil at the sound of early mass and not released until vespers. It is little to be wondered at that the first post-revolution act of the newly liberated masses was to climb to the belfries and demolish the hated bells.

¹⁴ Round Table Discussion, Norman Wait Harris Foundation, 1926, Chicago. Copy in Library of Office of Education, Washington, D. C.

The governments up to 1910 centered their interest solely on Mexico City and the larger cities of the country. These centers of population were like huge showcases in which false aspects of general social well-being and culture were exhibited. Visitors from other lands were conducted to these show places, became permeated with the semblance of prosperity and progress, and returned to their homelands with glowing reports of the wealth of the country. The thousands of little towns, the villages in the heart of the mountains and in the depth of the valleys, were left outside the radius of the national movements for development. To this systematic and criminal abandonment of the masses at the hands of egoistic governments Dr. J. M. Puig Casauranc, Minister of Public Education in Mexico, attributes the backwardness of the nation and "to a considerable extent, the frequent internal commotions and sufferings of all kinds which the country has been experiencing during its life as a Republic."¹⁵ These conditions obtained in feudal Mexico until 1910: chattel slavery in parts of the republic, workers forbidden to organize under pain of death, over 80 per cent of the population illiterate and denied a chance at self-betterment.¹⁶

Then came Madero, spurred on by the patriotic aim of putting an end to this tyranny. Ideals of democracy supplanted those of despotism, and the fundamental notions of social equality and individual rights to property and educational opportunities were diffused throughout the country. At first these ideas brought confusion to the minds of many Mexicans and aroused the ambitions of numberless subalterns who yearned for commands of their own. In this way may be explained the pullulation of hundreds of colonels and generals who fought to supplant the ruling faction and to participate in the spoils. A long decade of arbitrary acts and exactions followed Díaz's fall. The masses, led on by bright promises of social and economic betterment, followed their improvised

¹⁵ De Nuestro México, Mexico, D. F., 1926, pp. 172-3. (This quotation and all subsequent quotations from Mexican sources have been translated by the author.)

¹⁶ Gruening, Ernest, *Emerging Mexico*, in *The Nation*, Vol. 120, No. 3127, June 10, 1925, p. 650.

leaders, ignorant of their intentions but finding diversion and excitement in the showy manoeuvres of battalions and armies.

One dictator followed another, each successful as an agitator but a failure as a ruler. During Carranza's rule the new Constitution of 1917 was adopted and promulgated, as an outcome of the effort to restore the Juárez Constitution of 1857, the liberal and democratic features of which had been almost totally disregarded during the long Díaz régime. The new constitution, although notably visionary and idealistic in its provisions concerning land and labor, clearly sets forth the program of the Revolution, which came to be regarded as social rather than merely political or agrarian.

Mexican thinkers and leaders soon realized that political emancipation must be accompanied by economic freedom and that, to be effective and lasting, this latter demands the spiritual enlightenment of the great masses. The Indians, who constitute about half of the entire population, must be made to feel that they are an integral part of the nation; that they are necessary for national well-being and progress and that the federal government is ready to help them to develop into worthy citizens for their own good and for the good of the republic. They must be made to realize that the federal government is their friend; and considerable has been accomplished in this direction through restoration and grants of land to communities and villages whose population is principally indigenous. The same policy is being followed among the depeopled mestizos of the rural regions and the laboring classes of the cities and towns. The general feeling of incompetence and of its resultant inferiority complex is being successfully overcome through the activity of the Federal Department of Public Education, which, since the administration of Alvaro Obregón, has been establishing and maintaining federal schools in all parts of the republic.

Thus the revolution, as it is being carried on in Mexico today, is not merely another upheaval, another change of government in which victorious politicians reap the harvest at the expense of the masses. It stands for the distribution of land and property, for equality of all citizens before the law, for

better working conditions and a higher standard of living, for the equalization of educational opportunities according to the capacity of the individual, for the incorporation of the indigenous peoples in the Mexican family, for the creation of a national spirit and pride, and for the establishing and maintaining of a sound government of a democratic character. In the constructive policy of the revolutionary governments since Carranza's time one can readily discern the desire for true social reform. Patriotic interests and aspirations are being inculcated in all classes. A real nation is in the making. As Norton says,¹⁷ "Nationalism has its roots in a group psychology, in a common history, common defeats, and common victories. It is fostered by a common culture, the instinctive appreciation of the same kind of things in literature and art and architecture. It is given purpose and force by a common economic life." And Mexico's revolutionaries are attempting to develop—with a remarkable degree of success—that psychological unity which is the essence of nationality. Little content with mere theorizing, they have adopted a philosophy of action, but their field of action is not a battle field. It is a germinating seedbed of abundance to be acquired through work and energy, and they look to the school to see to it that these seeds are properly brought to flower in the form of a new and truly revolutionary generation of loyal Mexicans.

Dr. J. M. Puig Casauranc¹⁸ points the way in the following words:

We must kneel before the altars of our country and, in a generous denunciation of our political rancors, put aside all group hatred; we must free ourselves from all political parties and ideas of social distinction and join in one common project—national reconstruction, along lines not only of material progress but also of justice, public education, and sound government, which will make us all feel proud of being Mexicans. . . .

Dr. Puig continues by expressing the belief that if this national reconstruction should prove too great a task for the present generation, surely the coming generation will be able to achieve it.

¹⁷ What's the Matter with Mexico? in *The World's Work*, Vol. 56 No. 5, September, 1928, p. 530.

¹⁸ *Op. cit.*, p. 78.

CHAPTER II

FROM THE FALL OF THE DÍAZ RÉGIME TO THE REFORM OF 1921

Before entering upon the treatment of Mexico's modern educational movement, a general picture will be presented of the school conditions existing when the reform was initiated. In this way the far-reaching changes wrought by the Revolution can be more fully understood and appreciated.

To begin with, it must be remembered that during the colonial period and later, in the first years of the republic up to 1856, an official association existed between the State and the Church, whereby the latter was assigned control of all education. Wherever there was a church there was likewise a school. The instruction offered was chiefly religious, with a very limited amount of reading, writing, and arithmetic, and naturally the pupils enrolled were obliged to accept the Catholic faith—an obligation which operated to exclude large numbers of Indians who still retained belief in their own gods. In addition to the establishment throughout the nation of these institutions of primary instruction, the Church also founded universities and professional schools in several of the larger cities. As Montavon observed in his article on the Mexican problem,¹ "In measuring what was accomplished, one must remember that public free education for all people is a very modern movement. The fact remains and cannot be disputed that the intellectual foundations and traditions of Mexico are due to the Catholic Church."

It must not be thought, however, that Mexican thinkers were satisfied with the educational conditions which prevailed during those early years. In 1822 the Lancastrian type of school appeared.² These schools were conducted by a private company headed by a group of eminent patriots who suc-

¹ Montavon, W. F., Director of Legal Dept., National Catholic Welfare Conference, *The Facts Concerning the Mexican Problem*, Belvedere Press, Balto., 1926, pp. 28 ff.

² These monitorial schools were introduced into the U. S. in 1806 and enjoyed considerable popularity until about 1840.

ceeded in obtaining the aid of the national government. Altogether, eleven of these monitorial schools functioned in Mexico proper: four for boys, five for girls, one co-educational, and one night school for adults. (In 1829 a system of such institutions was organized for the Mexican State of Texas.³) In 1890 they were converted into government institutions by order of the Secretary of Justice and Public Instruction, Lancastrian methods having been found incompatible with the newer theory and practice in Education.⁴

In a publication entitled *Public Education in Mexico* through Presidential Messages,⁵ frequent mention is made of discussions and "plans" for public education. As early as 1826 General Victoria⁶ declared that the Government was "meditating an extensive program of education which will receive the attention due to the foremost of the Cámara's exclusive powers." Many lengthy discourses were pronounced in favor of extending the activities of the federal government in educational matters, and especial emphasis was placed on the importance of the primary instruction that "should be offered." In 1833 Señor Don Valentín Gómez Farias, vice president, claimed that primary instruction, although the "most important branch of education," was being grossly neglected and he advised the government's wholehearted support if Mexico was to have "good fathers, good sons, and good citizens, who would recognize and perform their duties."⁷ In 1856 during the presidency of Benito Juárez, the federal government took over all possessions of the Church—landed property, schools, charitable institutions, and endowments—and thus stripped it of its means of promoting education, which became a function of the State. President Juárez proclaimed⁸ that the constitutional government during his administration would exert every effort toward increasing the number of free primary

³ Cubberley, E. P., *History of Ed.*, Houghton Mifflin Co., 1920, p. 663.

⁴ *La Educación Pública en México a través de los mensajes presidenciales*, Publ. of the Sec. of Pub. Ed., Mexico, D. F., 1926, p. 341.

⁵ *Ibid.*, passim.

⁶ *Ibid.*, Message to General Congress, January 1, 1826.

⁷ *Ibid.*, Address on taking oath of office, Apr. 1, 1833.

⁸ *Ibid.*, Message to the people, Vera Cruz, July 7, 1859.

schools, providing professionally and morally equipped teachers, inciting the several states to the founding and maintenance of a greater number of schools within their respective boundaries, re-organizing and enriching the curricula of secondary and higher schools, and improving the lot of the teacher. Free and compulsory instruction was provided for by law in the program outlined by Juárez, but the family, the municipality, the State, and the various religious organizations were permitted to administer it. For the most part the State left it to the other bodies, and the Church organizations once more became the leaders in educational endeavor.

From this time down to the reform, no great change is noticed in Mexican public education. The states which could afford to do so, and which were so inclined, supported a small number of schools offering instruction comparable to that found in the schools of the United States at the time. Discussions pertaining to the values of education continued to take place in the meetings of the Congress, and elaborate plans and programs were drawn up for the improvement of the schools; but discussions and plans alike remained within the walls of the Cámara, and in 1910 we find Professor Luis G. Monzón, in a proposal for the federalization of the schools, declaring that not all the states had the same school organization, that different systems were operative within the separate states, and that even in the state capitals many official schools were being conducted in inadequate buildings, without system, discipline, or regulations, and with faulty programs of studies taught by poorly trained teachers with antiquated and defective methods.⁹ After the overthrow of Porfirio Díaz in 1911, the educational system was "left in the hands of the states and municipalities as a part of the revolutionary doctrine, even in the Federal District, and only in a few places—notably not in the capital—did it receive adequate attention."¹⁰

⁹ Boletín de Instrucción Pública, Publ. de la Sec. de Instrucción Pública y Bellas Artes, Vol. XVI, No. 1, 2, 1911, p. 58.

¹⁰ Priestley, H. I., *The Mexican Nation: a History*, 1923, p. 442. By permission of The Macmillan Company, publishers.

Article 31 of the Constitution of 1917¹¹ provides that it shall be the duty of every Mexican:

I. To compel the attendance at either private or public schools of their children or wards, when under fifteen years of age, in order that they may receive primary instruction and military training for such periods as the law of public instruction in each State shall determine.

II. To attend on such days and at such hours as the town council shall in each case prescribe, to receive such civic instruction and military training as shall fit them to exercise their civic rights, shall make them skillful in the handling of arms and familiar with military discipline.

The States subsequently enacted school laws in keeping with this constitutional provision, but owing to unsettled political and economic conditions very little was accomplished in the way of providing schools or teachers to make possible the enforcement of the law. As before, only the upper classes were afforded the opportunity of more than the most rudimentary instruction. The vast masses of industrial and agricultural workers—the huge bulk of the population—continued an existence unaffected by the enactment.

In general, school conditions remained practically the same as those indicated by Professor Monzón in 1910. Notwithstanding the constitutional provision for compulsory education through the fourteenth year, considerable divergence existed from state to state. Aguascalientes, for example, required attendance from the seventh to the fourteenth year; Sonora, from 7 to 15; Tabasco, from 6 to 12; and in Jalisco, attendance was compulsory for all persons between the ages of 6 and 30 who had not completed the course of primary instruction. The school year ranged from eight to ten months, climatic variations causing the southern states to divide the work into two terms. The school day also varied from state to state, common practice revealing a spread of from four and a half hours for the first two years of primary instruction, to eight hours for the secondary schools. Classes were held five or five and a half days per week.

¹¹ See: The Mexican Constitution of 1917 compared with the Constitution of 1857, trans. and arr. by H. N. Branch, in *Annals* 69-71, 1917, Amer. Academy of Political and Social Science, Philadelphia, Pa.

The caliber of instruction offered in Mexican state schools was generally poor. Extremely formal and unscientific methods were employed, and emphasis was placed on the formal materials of education rather than on the development of the abilities and interests of the pupils. Memorization, recitation, and cramming for examinations were the salient features of the system. The content of the various curricula was totally inadequate for the needs and demands of modern life. Discipline was consequently poor also—especially so since state laws prohibited corporal punishment. The school buildings, with notable exceptions in several of the larger cities, were old and out of repair. The furniture was generally of the poorest type, the textbooks limited, and the supplementary equipment demanded by modern education was apparently unknown.

The grading systems employed in Mexican state schools varied somewhat from state to state, but the general principles involved were common to all states. The following may be accepted as typical: 0, Failure; 1, Conditioned; 2, Passing; 3, Good; and 4, Excellent. A frequent variation consisted in expressing the grades in letters—the initial letters of the Spanish words indicative of the value. Tests and examinations were fixed by law in most states. Final examinations were public and oral, conducted by a board composed of three persons, the teacher ordinarily serving as chairman. The other members were selected by the teacher, subject to the approval of the teaching body and the superintendent of schools. A third of the time allotted to each pupil was taken up in the examination by each individual member of the board of examiners. In many states the time limit of the examination was extended in proportion to the percentage of absences of the pupil during the school term. The average time for a given subject was 20 minutes, but sometimes this was extended over two or three hours. When the nature of the study required, the examination was written. The final grade was usually determined by averaging the examination mark with the average of the tests administered during the term.

In all states teachers were required by law to have completed successfully the work of a Normal School. Exceptions were made, however, in the cases of candidates who passed examinations prepared and administered by teachers holding Normal School certificates, provided the candidates were eighteen years of age or over, of good moral character, and not a minister or an agent of any religious sect. Principals were commonly required to hold the Normal School certificate. In spite of these legal requirements, a paucity of qualified teachers, coupled with the prevailing financial straits, forced the state governments to enlist the services of many untrained instructors. Salaries were very small and extremely uncertain. Principals received from 150 to 200 pesos (\$75 to \$100, United States currency) per month, and teachers in the elementary schools, from 50 to 120 pesos (\$25 to \$60). Secondary teachers were paid slightly higher salaries, generally according to the number of hours taught per week.

In the Federal District and in the National Territories, the federal government had complete control of all schools. In the states, the respective state government maintained its own system of education. The Director General of Instruction, appointed by the governor, was the head of the school system, although in some states his jurisdiction extended only over the elementary and normal schools. In this latter case, secondary and professional schools remained under the direction of the governor. Within the separate states, the various municipalities constituted administrative school units, and were obliged to establish and maintain the schools necessary for their sections. The state government, however, retained the right to appoint the teachers and to supervise all the schools of the state.¹² The funds for the maintenance of state educational activities were derived from taxes collected principally from the communities in which the schools were located. In the state of Guerrero, for example, an additional

¹² Moisés Sáenz, *Reseña de la Educación Pública en México en 1927*, Publ. of the Sec. of Pub. Ed., Vol. XVIII, No. 13, Mexico, 1928, p. 7.

20 per cent of the amount due as state taxes was collected for educational purposes.

Elementary instruction was generally divided into primary and superior elementary schools. The primary elementary school covered a period of four years during which instruction was offered in the three R's, geography, history, physiology, and calisthenics. The superior elementary grades had a two-year course continuing practically the same fundamental subjects as the primary, and adding bookkeeping and domestic economy. Ordinarily completion of the superior elementary course admitted the pupil to the Preparatory Schools or to the Normal School of the state; but a few of the states required the passing of an entrance examination.

The Preparatory school course consisted of a five-year period of instruction, the principal object of which was implied in the name—preparation for the professional schools or for the university. As in the case of the elementary schools, the subjects offered corresponded closely to the offerings in American (U. S.) institutions of the same level. In many instances the Preparatory school—the secondary school of the Mexican states—was conducted in connection with the state Normal School, which prepared its graduates for teaching in the elementary grades. The faculties were composed in great part of professional men of the community who devoted one or more hours a day to the teaching of the subjects in which they were most proficient. A sizable number of the regular full-time professors were university graduates and many others had followed courses in some university or professional school.

All states maintained a few rural schools whose course covered three years of five or six months of instruction each, resembling that of the primary elementary schools. The buildings were generally one-room huts—often thatched-roofed—of cheapest construction; and the furniture, materials, and textbooks were those discarded in the town schools. Supervision was practically non-existent for these rural establishments and instruction was consequently extremely irregular and inefficient. Moreover, the vast majority of the

schools were situated at points of advantage for the teacher, so that they were highly inaccessible to any considerable number of potential pupils.

Nowhere did the schools attempt to fit instruction to the interests, desires, and needs of the school population. A stereotyped offering was the iron rule. Individual differences were unrecognized except at the university level. Childhood and adolescence received identical treatment. Memorization and pupil recitation under authoritative control constituted the heart of the teaching procedure. Originality and initiative were quite generally frowned upon, even in the teacher, and no effort was made to have the pupils become conscious of the objectives sought or to face the need for the attainment of established goals. Only a small fraction of the population, the wealthy in the towns, were reached through the schools, and few if any steps were taken to interest the masses in educational or cultural advancement. Designed solely for the purposes of the professional classes, who looked with contempt on every form of manual work, the programs of studies included no mention of the industrial arts and offered no attraction for the working classes. A feeling of indifference, bordering on antipathy, characterized the attitude of the people towards education in general and towards the schools in particular.

Such was the state of education in Mexico when in 1921, during the presidency of Alvaro Obregón, the national constitution was amended and the federal government was given the right to establish, organize, and maintain all kinds of schools and educational institutions throughout the Republic, and to legislate in all matters in any way related to these institutions.¹³ A federal department of Public Education was created that same year and an extensive movement for educational reform throughout the Republic was launched immediately. In addition to the establishment of schools, museums, libraries, and other cultural organizations, the Federal Department of Public Education serves as a stimulating

¹³ *El Movimiento Educativo en México*, Publ. de la Sec. de Ed. Púb. México, D. F., 1922, pp. 480-481.

and advisory body for the State authorities. The individual states retained the right and obligation to provide and support schools of their own and to legislate independently concerning them, but agreements were entered into whereby the federal government appropriates a specified sum of money, in proportion to the population of the respective state, for the establishment and maintenance of elementary, secondary, normal, commercial, technical, and rural schools.¹⁴

In an address before the Mexican Congress in 1929, Ezequiel Padilla, Secretary of Public Education in Mexico, made the following statement¹⁵ regarding the results of this dual educational system:

Since the Department of Public Education inaugurated its vigorous program to complement and support the educative activities which the states of the Union, pursuant to a Constitutional provision have been performing, it has come about that in proportion as the Federal Government has increased its participation, the local governments have diminished theirs. The situation grew so serious that for a time one could say that in many cases the establishment of federal schools, especially in the more important towns, did not signify the founding of new schools, but rather the mere change of supporters. Energetic measures and the firm determination of the Executive remedied this condition considerably, so that from 1925 on, the educative program of the Federal Government has signified a real increment to the activities of the Nation in educational matters.

Today the educational program of the Federal Government is directed by the Secretary of Public Education, a member of the cabinet, and operates both in the Federal District and in the States and Territories, through the following bodies:

1. The Department of Primary and Normal Instruction.
2. The Bureau of Secondary Education.
3. The Department of Technical, Industrial, and Commercial Education.
4. The Department of Rural Schools and Indigenous Culture.
5. The Bureau of Cultural Missions.
6. The Department of Psycho-pedagogy and Hygiene.
7. The Department of Fine Arts.
8. The Bureau of Archeology.
9. The Department of Libraries.
10. The Bureau of School Statistics.

¹⁴ La Educación Pública en México a través de los mensajes presidenciales, Publ. de la Sec. de Ed. Pub., México, D. F., 1926, p. 218.

¹⁵ Memoria que indica el Estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. de la Sec. Ed. Pub., Vol. XXII, No. 4, Mexico, 1929, p. viii.

11. The Bureau of Publications.
12. The Bureau of Construction and Reparations.
13. The Bureau of Savings and Loans.
14. The Bureau of Educative Extension by Radio.
15. The Administrative Department.
16. The National University.

Particular effort is expended in the fields covered by the following departments: Rural Schools and Indigenous Culture; Primary and Normal Instruction; Secondary Education; Technical, Industrial, and Commercial Education; Fine Arts; and Psycho-pedagogy and Hygiene. Minor bureaus and sections are found under the different main departments, each having its own peculiar function in the program. All departments cooperate for the success of the educational system. In the chapters which follow, the activities of the Federal Department of Education, and the increasing influence it is exerting on educational progress throughout the entire Republic, will be presented in detail.

CHAPTER III

THE DEPARTMENT OF RURAL SCHOOLS

I. RURAL SCHOOLS

The most salient feature of the educational reform in Mexico is the rural school movement. No parallel is found in the history of education for this enormous enterprise of the Mexican Federal Government. Seven or eight million people—at least half of the entire population—are to be educated to the point where they can rightly be considered a vital part of the Mexican nation. Seven or eight million rural inhabitants, heretofore forcefully submerged in the most abject poverty and ignorance, are to be afforded the opportunity of social and economic betterment through the widespread activities of the national government. A harmonious and homogeneous unity is to be molded out of the various social groups and the school has been chosen as the means to that end. Not the traditional rural school as we know it, with its regularly scheduled classes of reading, writing, arithmetic; but a rural school that has already become the origin and the center of most of the socially beneficent activities of the entire community, and is now being heralded as the most powerful factor in the gradual regeneration of Mexico.

The rural school movement had its beginning at the very dawn of the Revolution. During the last years of the Díaz régime, federal control of rural education was considered, and in May, 1911, a bill was approved in Federal Congress by which the federal government accepted, for the first time in Mexican history, the responsibility for such instruction throughout the Republic.¹ Ability to read, write, and speak the Spanish language and to perform the fundamental operations of arithmetic were to be the aims of the schools established under the resulting presidential decree which was is-

¹ For the text of this decree see *La Educación Pública en México a través de los Mensajes Presidenciales*, Publ. of the Sec. of Pub. Ed. Mexico, D. F., 1926, p. 417.

sued the day following the approval of the bill by the Congress. For the creation of these schools the expenditure of \$160,000 was authorized for the first year, but this figure was afterwards reduced to \$80,000—a ridiculous sum for the extent of the proposed undertaking.

The provisions of this decree could not possibly be carried out with the meager sum allotted. Furthermore, the revolution broke out shortly afterward and with the nation in the throes of a political upheaval, few were the minds that could hold to the idea of education. Peace and order had to be established and maintained before the task of educating the masses could be undertaken.

The Revolution was, and is, the determined movement to free the masses of urban and rural workers from the servitude, wretchedness, and hopelessness in which they have suffered for centuries. Social opportunities, property ownership, intellectual enlightenment, economic freedom, equality before the law, the awakening of a spirit of nationalism that would pervade the entire population including the millions of indigenous peoples until then considered incapable of being more than chattel to be used and abused at will by government-made or self-established overlords—these are the outstanding objectives of the Mexican Revolution, and the rural school movement aims primarily at preparing the people for these advantages.

In 1912, during Madero's administration, the Under-Secretary of Public Education, Alberto J. Pani, took up the problem of rural education as provided for by the Decree of 1911. A staunch partisan of the Revolution, Pani saw that the program proposed was utterly inadequate. The instruction called for was abstract and extremely rudimentary in character, and although it might have diminished very slightly the enormous proportion of illiterates in the country, it would have brought no social or economic benefits to the people because it made no provisions for means of applying the knowledge imparted. In view of this fact Pani procured the advice and opinions of men from all walks of life, both in Mexico and abroad, and from

the inquiry thus instituted have come almost all the features that have been included in the existing system of rural schools.²

The new rural school is not, therefore, a "headlong plunge of the central office, nor is it the mere outcome of the opinions of a group of men to whom the president of the Republic commended the difficult task of solving or directing the educational problems of Mexico; it is the fruit of thorough investigation in which, among many other sources, we have drawn upon the above-mentioned symposium in which no less than fifty opinions of experts and authorities in the educational field were represented."³

Under Madero a federal system of 500 rural schools was conceived and some fifty schools were established in 1912. This number was increased in 1913 under Huerta, to about 200. From this time to well after the adoption of the new Constitution of 1917, during Carranza's administration, extremely unsettled conditions prevailed in the country and little was accomplished in the field of rural education. In 1921, chiefly through the eloquence and tireless effort of José Vasconcelos, then Rector of the National University, the present Federal Department of Public Education was created by constitutional amendment,⁴ and the central government was given the right to extend its educational activities to all the states of the Republic.

Vasconcelos was appointed Secretary of Public Education and at the outset he recognized that in view of the revolutionary doctrine which actuated the movement, a new type of education was necessary. This new type of education had to be determined according to the needs of the people, and the people had to be made to feel the need of enlightenment. Volunteer teachers, especially women, willing individuals who would undertake to teach one or more persons to read and write, had been at first called for by Vasconcelos, when Rector of the University, to start the work of decreasing illiteracy throughout the country. These pioneers were given

² Dr. J. M. Puig Casauranc, *El Sistema de Escuelas Rurales en México*, pub. by the Sec. of Pub. Ed., Mexico, D. F., 1927, p. XIX.

³ *Ibid.*, p. XIX.

⁴ *El Movimiento Educativo en México*, Mexico, D. F., 1922, pp. 480-81.

the title of "honorary teachers." Next, missionary teachers were sent out, in 1922, and 1923, to locate indigenous centers, to study the economic conditions of the people, the native industries and the way to encourage and perfect them, to fire the people with a desire for education, and to determine the best way for the federal government to carry out its program. These missionary teachers gathered together groups of natives and started little schools, leaving behind them, on departing for another region, their best pupils as rural teachers. The little schools thus established were given the name, "the People's Home."

By 1924 a system of rural schools was well established, there being at the close of that year 1089 schools with 1146 teachers and 65,000 pupils. The 48 missionary teachers became "supervisors" in 1925, and the schools were given the more conventional and prosaic name of "rural schools."⁵

In his inaugural address on December 1, 1924,⁶ President Calles made the following declaration:

The fundamental bases for the betterment of the great communities of my country, and of the rural masses in particular,—the workingmen and the indigenous folk,—are their economic freedom and their educational development until they are fully incorporated into civilized life. The land problem, settled in the fashion I have indicated, will increase agricultural production and will bring economic freedom to the countryman; the education of the rural districts of the nation, the consolidation of rights, and the legal protection of the working element of the cities and industrial centers, will be the special aims of my administration which, in all other respects, will proceed on a basis of equity and justice for all social classes.

The problem of the education of the rural masses will be one to occupy my particular attention. The special systems in this connection will be studied in detail by the Secretariat of Public Education; but I am even now able to outline the general features of the work, which will consist not only of combating illiteracy, but also of achieving a harmonious development of the spirit of our rural and indigenous population, so that this great part of our people may, as I have already said, form a responsible part of civilization. In brief, the rural school, extended to the limit of our economic possibilities, will be our constant preoccupation.

President Pascual Ortiz Rubio is at the present time continuing the educational policies of Calles. This program, without neglecting the University, has been and is placing greatest

⁵ Moisés Sáenz, *La Educación Rural en México*, Government Press, Mexico, D. F., 1928, pp. 13-14.

⁶ *El Sistema de Escuelas Rurales en México*, Publ. of the Sec. of Pub. Ed., Mexico, D. F., 1927, p. 9.

emphasis on urban elementary instruction, workingmen's schools, technical and industrial institutions, and most particularly on rural schools.

Early in his administration President Calles ordered the establishment of at least 1000 new rural schools per year.⁷ Although financial conditions have made this provision impracticable, noteworthy progress has been achieved. From the 1089 rural schools functioning in 1924 the number has risen to 3594⁸ in 1929-1930, an increase of 417 schools per year for the six years.

To facilitate uniformity of procedure and progress, all federal institutions of elementary character functioning in the States have been placed under the control of the Department of Rural Schools, this organization being newly designated as the Federal Department of Rural Schools, Elementary Schools in the States, and the Incorporation of the Indian.

Functioning under the direction of this department there are at the present time⁹ 24 model elementary schools with 168 teachers, maintained for demonstration purposes, to quicken the interest and action of the state and local authorities in advanced educational theory and practice. Gratifying progress has been obtained in this direction. The spirit of the new education has already pervaded the traditional and antiquated school systems of the more progressive states, and constantly diminishing opposition is being met in the elementary schools of the more conservative members of the federation. Demonstration schools modeled after those maintained by the federal government are now being conducted in connection with practically all State Normal Schools, and it is, perhaps, not too conjectural to predict that within the next decade or two the "activity school" will have in fact become the national instrument of public education. In addition to these model schools, 363 urban and semi-urban elementary schools taught by 1318 teachers, are maintained in the im-

⁷ Dr. J. M. Puig Casauranc, Sec. of Pub. Ed., in a lecture delivered at Teachers College, Columbia Univ., Mar. 23, 1926, *Publ. of Sec. of Pub. Ed.*, Vol. IX, No. 5, Mexico, D. F., 1926, p. 6.

⁸ This figure is quoted from personal letter to the author from Aaron Sáenz, Sec. of Pub. Ed. in Mexico, dated June 28, 1930.

⁹ *Ibid.*

portant cities of the States. The enrollment in these 387 schools is 76,311, the average attendance being 48,314.

Of the federal rural schools proper there are 3594, conducted by 4508 teachers. Of the total enrollment of 303,837, almost one-third are adults who attend the evening classes. The average attendance is 162,237 in the day school and 49,250 in the evening session—a total of 211,487.

The rural school offers a three years' course to boys and girls from 6 to 14 years of age and generally holds night classes for adults. The school year is nominally of 210 days but the climate, local conditions, and the occupations of the people cause variation in this respect. Officially, four hours during the day are devoted to the children and two at night to adults. As a general rule, however, the activities consume a much greater number of hours.¹⁰

The program aims on the one hand at imparting the ability to speak, read, and write Spanish and to perform the four fundamental operations of arithmetic; and on the other hand, at the acquisition of knowledge, habits, and attitudes conducive to the living of a worthy life in the community. An effort is made to include four definite values in the instruction offered—an informational value, a practical value, a disciplinary value, and a cultural socializing value.¹¹

The informational value is imparted so as to permit and even encourage its application in the everyday activities of rural life. In addition to the three R's, instruction is given in general and Mexican history, geography, and civics, to arm the pupils with such knowledge as will tend to make them more worthy members of the community and abler units in a future national collectivity. The utilitarian or practical value is striven for through instruction and actual training in agricultural pursuits and minor industries. This part of the program varies from region to region, according to the products raised and manufactured in the neighborhood. When the soil and climate will permit the cultivation of other more profitable crops, or when the raw materials available can be

¹⁰ Moisés Sáenz, *Reseña de la Educación Pública en México en 1927*, Publ. of the Sec. of Pub. Ed., Vol. XVIII, No. 13, p. 14.

¹¹ Dr. J. M. Puig Casauranc, *El Sistema de Escuelas Rurales en México*, Publ. of Sec. of Pub. Ed., Mexico, D. F., 1927, p. XX.

utilized in the manufacture of other and more salable articles, instruction and training are directed toward the change. Marked emphasis is placed on pupil activity, especially in connection with the vocational possibilities of the vicinity. The disciplinary value comes through the constant action of the teacher on the pupil to the end of inculcating a proper and just attitude toward mutual rights and obligations in everyday activities. The cultural value is attained through the agency of the social functions, parent and parent-teacher associations, readings, entertainments, and similar activities of which the rural school is the center.

Quoting Dr. John Dewey's definition of education ¹² as the "sum total of processes by which a community or social group, whether small or large, transmits its acquired power and aims, with a view to securing its own continued existence and growth," Dr. Puig ¹³ maintains that this philosophical definition is amply satisfied in the educative values which it is aimed to impart in the Mexican rural school. The sum total of Mexican power, ideals, knowledge, and aims is to be transmitted to future generations through education and since the population of Mexico is preponderantly rural, this transmission must be effected to a great extent through the rural school.

Designed to meet the present needs of the Indians and of the de-peonized mestizos, the type of education offered must obviously differ greatly from that found in the schools of the city. The children of the rural district have fundamentally the same instincts, emotions, and abilities as their brothers in the towns and cities, but owing to the great dissimilarity of environment and mode of living, their interests, desires, and needs are very unlike and their instruction must be different both in content and in purpose.¹⁴

In the first two years of the rural school the activities are principally of a motor and constructive character. They have to do with gardening, animal breeding and care, preparation of fruit and vegetable salads from garden products, preparation of beverages from various tropical fruits, sanitary mea-

¹² Article on Education in Monroe's *Cyclopedia of Education*, p. 398.

¹³ *El Sistema de Escuelas Rurales en México*, Publ. of Sec. of Pub. Ed., Mexico, D. F., 1927, p. XXI.

¹⁴ *Ibid.*, pp. 79-88.

tures in connection with the person and the home, etiquette, laundry work, house building, sewing, cooperative undertakings, physical exercises, games, toy making, weaving, and the like. All these numerous activities serve to motivate conversations among the pupils and with the teacher, so that the Spanish language is in constant use. Stories and anecdotes are told and read by the teacher and reproduced by the pupils in the "story hour." At about the beginning of the second half of the first year, writing exercises are given in which the pupils practice phrases and expressions related to the activities they are performing. The fundamental operations of arithmetic are likewise taught in connection with pupil activities, simple problems of both mental and written variety being worked as they arise in the day's occupations. The pupils are taught to love the school and to revere the "*patria*," or their country, to salute the flag, and to sing the national anthem.

The work of the third year proceeds along the same lines, but is much more comprehensive. Training is given in domestic economy and hygiene; simple dishes are prepared with the use of kitchen utensils and wood and charcoal fires; fruits and vegetables are preserved and jams and jellies are made; the proper use of dishes and table implements is taught along with the principles of serving; practice is given with carpenter's, mason's, and painter's tools; washing, ironing, mending, dry cleaning and pressing are done; simple articles of clothing, and straw and cloth hats are manufactured. Pupils of the third year participate in the government of the school as well as in the care of the school premises and of the animals and gardens. Coordination between mind and activities is, of course, continued on a higher plane, and work in the national language includes written exercises dealing with reports of projects developed, letters, and other original compositions.

Reading is also taken up during the third year, in the form of story books and easy readers prepared especially for the Rural Schools. The natural sciences are taught in connection with the gardening and animal breeding activities; geographical knowledge is imparted through excursions to neigh-

boring cities or towns, produce markets, mines, factories, shops. National history is taught through talks by the teacher, the dramatization of historical episodes, the making of albums and the like; arithmetic in the third year includes simple fractions, the fundamentals of geometry, and their practical application in everyday life. Music and physical education play an important rôle in the work of the rural school and are emphasized throughout the entire course.

The night school for adults stresses the following points: reading and writing; practical knowledge making for more efficient work and more enjoyable living; information relative to work, capital, and labor interests; and social education through festivals, concerts, and friendly gatherings.

The rural masses have reacted very favorably to the socializing and educative efforts of the federal government through its rural schools, and the major part of the communities have built or turned over to the Department, school buildings which as a general rule are, next to the church, the best in the region. Moreover, the numerous organizations of parents and townspeople are contributing generously with school equipment, furniture, agricultural implements, and sporting goods,¹⁵ and thus show clearly that the rural school is becoming a center of real social interest and a true factor of integration.

As the garden is one of the most important features of the rural school, the Federal Secretary of Public Education aims to have each school have a plot of land for that purpose.¹⁶ The August, 1929, report of the department states that at that time 2758 schools had tillable land. The same report mentions the existence among rural schools, of 1807 chicken yards, 511 rabbit pens, 308 pig pens, 165 sheepfolds, 721 pigeon cotes, and 274 provisions for the breeding and care of cows, bees, silkworms, and the like. Fifty per cent of the schools had open air theaters for the presentation of play-

¹⁵ Boletín de la Sec. de Ed. Púb., Vol. VII, No. 8, Mexico, D. F., 1928, p. 253.

¹⁶ Mem. que indica el estado que guarda el Ramo de Ed. Pub. en Mex. el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, p. 403.

lets and comedies portraying purely national customs and manners, and with optimistic dénouements which may serve to modify favorably the character of the rural folk. It is hoped that all the schools will soon be provided with facilities for such cultural recreation.

Other activities growing out of the rural school and revealing its influence on the community are as follows: 2150 schools hold frequent meetings of the townspeople for the discussion of common interests and the solution of local problems; 2994 schools have waged successful health campaigns in the community, resulting in improved individual hygiene and more sanitary conditions in the home and in the village; several communities have brought telephone service to their neighborhood, 1353 kilometers of wires having been strung for this purpose; 155 post office substations have been opened, conducted generally by rural school teachers; 2561 schools have held exhibitions or fairs in which products of gardens and shops were displayed; almost all schools have athletic fields where both children and adults join in sports and games of all kinds; and special instructions have been issued to all rural schools to the end that they take active part in the anti-alcohol campaign instituted by the president of the Republic.¹¹ Leagues and Societies have been organized in every state and it is claimed that their influence is already being felt in numerous parts of the country.

One of the chief aims of the rural school is to inculcate a love for country, for life in the open, for agriculture, stock raising, and fruit growing—a loyalty for the hills and valleys that will take the place of the urge to migrate to the already too-crowded cities. And by providing facilities for entertainment and recreation, for increased production of improved products, for the advantages of modern conveniences, and other benefits before unknown, the Rural School is achieving signal progress in this direction.

The Mexican rural school, it is seen, is not merely a place where children receive education. It is a social center for the whole community. There the children, their older

¹¹ Provisional President Emilio Portes Gil, 1928-29.

brothers and sisters, their fathers and mothers, their friends and neighbors, all have numerous contacts and interests. Not only do the pupils form societies and clubs, but the parents also are included in these organizations, finding enjoyment and benefit in the social functions, the helpful suggestions of friends and teachers, and the cooperative enterprises which grow out of the school's activities. The whole community is connected with the school; a spirit of democratic liberty pervades all activity; the pupil-teacher-villager relations are most natural and underlain with the same ideals and interests for the good of the group.

This community of interests, of ideals, and of attitudes in the individual rural districts is a step toward the formation of a real patriotism. The realization that equality of opportunity, both spiritual and economical, is at last being granted to them by the national government—that "great and powerful friend of the rural masses"—is wisely being re-enforced with knowledge of the workings of that government and of the patriots and martyrs who made such a government possible.

The revolutionary governments since the days of Madero have been concentrating more and more on the problem of educating the rural masses, until today this movement for the cultural-economic-social-political incorporation of these erstwhile abandoned souls has become the foremost preoccupation of the Department of Education. From \$841,408 in 1924,¹⁸ the budgetary allowance for the Department of Rural Schools has risen to \$4,254,033.13 for 1930.

2. CULTURAL MISSIONS

Working in close conjunction with the Rural Schools, the Bureau of Cultural Missions aims at (1) the betterment of teachers in service, (2) the training of new rural teachers, and (3) the improvement of the rural communities. The constant numerical increase of federal rural schools has occasioned the employment of the services of many teachers with

¹⁸ El Sistema de Escuelas Rurales en Mex., Publ. of Sec. of Pub. Ed., Mexico, D. F., 1927, p. 315.

very limited training for the pedagogical and social work demanded of them. To train these teachers in the peculiar requirements of their profession is the work of the Cultural Missions.

In 1929 the Federal Government maintained seven traveling and two permanent missions. The traveling cultural missions are composed of the following experts: a female social worker, a professor of teaching technique, a professor of physical education, a professor of agriculture, a professor of crafts or minor industries, a teacher of music, and an expert in popular arts. These missions travel through the country and hold education and social institutes of four weeks' duration. All federal teachers within a certain radius attend these institutes, as do also many state teachers who desire to improve their professional abilities and broaden their interests. The farmers and other inhabitants of the district are invited to attend and many take advantage of the opportunity thus offered to improve their lot by receiving valuable counsel and suggestions in connection with their daily work and life.

Before starting out on these traveling missions the members of the group attend summer courses especially devised for their purposes by the Department of Education. As a general rule, the place selected for the institute is markedly rural. The first week is spent in making a thorough study of the living conditions, customs, ideals, natural resources and the economic necessities and possibilities of the district, and then the activities of the group of experts conform to the findings. Aside from the teacher training work, the group imparts to the parents and neighbors valuable information and instruction relative to hygiene and sanitation, physical education of children, domestic science, improved methods of cultivation of local products, the treatment of sick animals, prevention of epidemics, tanning of hides and skins, furniture making and use, and numerous other items of local importance. Social gatherings and festivals are held, and clubs and societies are organized for the furtherance of local interest in domestic economy, entertainments, and various forms of sports and amusements.

In 1928 the Cultural Missions held 52 institutes in 18 states and reached 2846 teachers—Federal, State, and private. Owing to the demoralizing influence of anti-Revolutionary groups in the states of Jalisco, Colima, Michoacán, and Guanajuato, President Calles ordered the concentration of the seven traveling Cultural Missions in these four states, where they have been, since August 18, 1929, especially active in the spiritual pacification of the country folk.³⁹ The awakening of a feeling of civic solidarity and loyalty to the national government is aimed at through public meetings, conferences, and "friendly chats," in which are discussed such topics as the distribution of landed property, the restitution of public lands, cooperative organizations, the educational work of the government, the Agricultural Schools, the opening of roads, irrigation, and the like. Fewer teachers were reached in 1929—2604 in all as against 2846 in 1928—but considerable wisdom lies in concentrating efforts where they are most needed.

The two permanent cultural missions functioned during 1929 in Xocoyucán, State of Tlaxcala, and in Actopán, State of Hidalgo, following a plan of community betterment and for the purpose of making a constant experiment in order to secure data on which to base a solid program of rural education for the country at large. The region of Xocoyucán was selected because it is a center of mestizo population which has a certain degree of homogeneity and in which a system of rural schools and a Rural Normal School is maintained by the Federal Government. Actopán has a similar system of rural schools and a normal school but its population is almost entirely indigenous and of outstanding backwardness.

The work of the permanent missions is based on the co-operation of the inhabitants of the region, the rural teachers, the school authorities, and the Rural Normal School. A "Co-operative Society for Community Improvement" is organized, with aims obeying the four fundamental needs of the vicinity: (1) economic development, (2) health, (3) home-betterment,

³⁹ Memoria que indica el estado que guarda el Ramo de Educación Pública en México el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, pp. 261-86.

and (4) recreation and amusement. To this end, committees are formed to attend to each of these major interests, one or more of the members of the mission serving with several townspeople on each committee.

The personnel of the permanent mission is made up of a social worker, a doctor of hygiene, a midwife, a visiting nurse, an agronomist, an expert in crafts, a carpenter, a mason, and a mechanic. In 1929 a small medical clinic was added to each of these permanent missions. The Federal Government believes that in the work effected by these two missions is to be found the means of rapidly modifying the composition of the adulthood of the rural districts of the nation and consequently, the integration of the Mexican family.

Ten Rural Normal Schools are maintained in different states for the creation of a new generation of rural teachers. These schools are located in regions predominantly agricultural, close to important population centers. The buildings are sufficiently large to accommodate the number of students accepted, and are well equipped with modern conveniences of schools of this type. Shops, gardens, orchards, poultry yards, chicken coops, animal pens, are connected with each school to provide practical experience in the future work of the students. A demonstration rural school is also conducted in order that the students may obtain adequate teaching practice before being graduated. The director and his wife, the teachers, and the students all live under the same roof in a homelike atmosphere, thus fostering group solidarity and affection in the entire plant.

The Rural Normal School aims to equip its students along three lines: (1) the academic preparation necessary for the proper performance of the cultural duties of the rural teacher, (2) the professional preparation necessary for efficient teaching in small communities, and (3) the practical preparation in agriculture, animal breeding, and rural crafts necessary for the economic development of the community to which they may be assigned.²⁰ To this end, four semesters of work, the

²⁰ *El Sistema de Escuelas Rurales en México*, Publ. of the Sec. of Pub. Ed., Mexico, D. F., 1927, p. 273.

first of which is preparatory, are required, including the following courses: Spanish, arithmetic, geometry, social sciences, nature study, music, physical education, penmanship, drawing, domestic economy, agriculture, rural crafts and industries, physiology and hygiene, study of rural life, technique of teaching reading and writing, social organization for community betterment, organization and administration of rural schools, and practice teaching in the Annex School.

Student government is the rule in these Rural Normal Schools. Clubs and committees are formed, in which all the students of the school share responsibility for the promotion of health, learning, and social activity; sports, order, and cleanliness. Campaigns are waged against alcoholism, malaria, and other endemic diseases.

The student body is recruited from the poorer classes, the requirements for entrance being the successful completion of the elementary grades, good health, and good morals. During the year 1929, 540 scholarships were awarded to deserving students, amounting to 118,260 pesos, or about \$59,130. The total enrollment for 1929 was 681 students, with an average attendance of 661. The graduates at the close of the year numbered 76, of which 49 were men and 27 were women.

In 1929 a salary scale was established for the rural teaching personnel, as a step toward a reorganization similar to that effected for primary and elementary teachers in the Federal District. Pending the results of a detailed study of the qualifications, experience, and abilities of the teachers, they have been grouped according to salary received. The salaries, which formerly were 2 pesos and 3 pesos per day are now 1.00, 1.50, 2.00, 2.25, and 3.00 pesos—the 1.00 peso being paid to volunteer teachers of the circuit schools. The salaries of the type or model schools and the other elementary schools operated by the Department of Rural Schools in the different states are considerably higher. Type school principals receive 9.00 pesos and teachers, 7.50; elementary principals, 5.00 pesos and teachers, 4.00.²¹

²¹ Memoria que indica el estado que guarda el Ramo de Educación Pública en México el 31 de agosto de 1926, Publ. of the Sec. of Pub. Ed., Vol. X., No. 18, Mexico, D. F., 1926, pp. 15-6.

The combined work of the Rural Schools, the Cultural Missions, and the other activities of the Federal Department of Education which directly or indirectly enter into the educational program, have paved the way for a new movement in behalf of the social and economic betterment of the rural masses. This movement is known as the "System of Rural Circuits" and was inaugurated by the Secretary of Public Education early in 1929.²² It consists of a system of rural schools established and maintained by the people themselves. Within six months after the inauguration of the system, 2491 schools had been added to the number of rural schools already functioning under the Federal Department of Education. Of the total number of these new schools 545 were central plants serving as model schools for others situated round about them. The teacher of the central school receives his salary from the Federal Government through the Department of Rural Schools. He acts as supervisor and principal for the schools in his circuit, and receives instructions and assistance from a federal supervisor and the Director of Federal Education in his State. The central government furnishes all supplies for all these schools.

At the present time, 2612 of these schools are functioning in the republic, with an enrollment of 109,704 pupils and an average attendance of 104,480.²³ These figures combined with those already quoted for the other schools controlled by the Rural School Department give a grand total enrollment of 413,541 and a total average attendance of 315,967 pupils.

The ardent enthusiasm with which Mexican educational leaders view the rural school movement and the achievements already attained through it, is evidenced in the following quotation:²⁴

Times change very rapidly; our country especially is progressing with such gigantic strides that the task, which scarcely five years ago began hesitatingly, is now a promising reality which cannot be destroyed by any economic or political upheaval that may occur. We firmly believe that everything else may be eradicated in Mexico . . . we even grant the possibility of the overthrow of the revolutionary government; we will concede, for our argument, even a

²² Memoria . . . Vol. XXII, No. 4, Mexico, D. F., 1929, p. 401.

²³ Data quoted from letter referred to in note 8.

²⁴ Puig Casauranc, Dr. J. M., *El Sistema de Escuelas Rurales en México*, Publ. de la Sec. de Ed. Pub., México, D. F., 1927, p. XXVI.

complete inversion . . . produced in Mexico through some lawless uprising;—institutions, methods, men, government—everything can change in Mexico, I repeat, but no one will ever dare to destroy the work of the Rural Schools, which now signifies the ambition, the will, the hopes of thousands of villages; a work which has been, by definite instruction of the President, absolutely unselfish, a work which to be successful had to be, as it has been, clearly and totally unhampered by political influence.

No one will dare to touch it, and in its permanence lies the possibility of a proximate redemption of the Mexican people.

And the permanence of the rural school seems certain. As a source and center of community interests and activities, the rural school has won the support and cooperation of the whole adulthood of the region in which the school is located. As has already been stated, parents and friends alike have joined forces in providing school buildings, land, equipment, and other elements necessary for the success of the program. They likewise take advantage of the night classes, conducted especially for their benefit and are profiting through the information and skills gained in this manner. More systematic and scientific agricultural and industrial methods, improved production, cooperative organizations, more wholesome and diversified recreational facilities, and general betterment of the material conveniences of the community as a whole have resulted in their becoming imbued with the spirit of the revolutionary educational movement being effected by the federal government.

They are realizing that the rural school has been carrying out the social principles for which, under such men as Madero, Zapata, Obregón, and Calles, they fought to free themselves from their wretchedness, their ignorance, and their fanaticism. They are realizing that the desired change cannot be imposed from without and that unless they take an active part in their own enlightenment they will again fall prey to the ruthless ambitions of a ruling class who will soon strip them of their lands, their property, and their liberty and submerge them once more in moral servitude. The social-economic transformation in which the rural peons will, along with the urban workers, enjoy the full privileges of free Mexican citizenship, must be the product of their own labors, and they are showing themselves eager to overcome the obstacles in the way.

3. CENTRAL SCHOOLS OF AGRICULTURE

Since the advent to power of President Obregón (1920-4), a concerted movement has been afoot to solve Mexico's Agrarian Question. It was during the administration of General Plutarco E. Calles, however, that real progress was achieved in this direction. Acre upon acre of land had been returned to communities and individuals by the Federal Government, but there were no funds with which to cultivate it and scant knowledge of proper methods of cultivation. A still greater problem confronted the government—that of providing for these two necessities. Ernest Gruening, in his "Emerging Mexico: III, Land and Labor," briefly describes the situation as follows:

President Calles inherits an agrarian mess that is desperately tangled. Communities that should have land haven't it. Others have land that is so sterile that it is useless. Others have land but lack implements and seeds to make it properly fruitful. Still others which do not want land have had it thrust upon them, are not cultivating it, and are furnishing ammunition for propaganda that no natives desire land. On the other hand, estates that were furnishing the country much-needed foodstuffs have been damaged productively to the detriment of the entire nation—for Mexico must import at higher prices what she cannot grow. New agricultural activity has been rendered timid not knowing whether the agrarian reform would follow the law or be guided by the whims or acquisitive propensities of some public official.²⁵

Subsequent developments are demonstrating that the Mexican government is really serious in its intention to solve its agrarian problem, is going directly to the heart of the question in its endeavor to straighten out the "tangled mess" described by Gruening. Gradually the Mexican people are coming to realize that the federal government is on their side and is willing and eager to help them overcome obstacles and improve their lot.

In 1926 a system of Farmers' banks was inaugurated to advance the necessary capital in the form of loans to facilitate the proper cultivation of the land, and central agricultural schools were founded to provide the much-needed information and training in modern agricultural practices. Eight such institutions have been opened, their major aim being to provide the young country folk with a cultural and agricultural in-

²⁵ The Nation, Vol. 120, No. 3129, June 24, 1925, pp. 713-4.

struction which will enable them to manage a farm efficiently and intelligently.

These central schools are maintained by the Federal Department of Agriculture.²⁶ They are boarding schools, situated in agricultural districts, and have liberal grants of land for large scale production, all the out-buildings of a modern farm, and the latest models of farming implements.²⁷

Typical of these schools is the Central Agricultural School in the State of Hidalgo. This plant, founded in 1926, has 560 hectares of arable land and, in addition, a vast acreage of mountainous territory that is devoted exclusively to grazing. The soil is fertile and the climate warm. Alfalfa, fruits, and vegetables are raised in considerable quantities; cattle, hogs, goats, and sheep constitute the live stock interests of the school, and aviculture is carried on to a profitable extent. The school proper comprises a main building in which are located the offices, dormitories, dining room, library, classrooms, kitchen, laundry, and other divisions connected with the service. Clustered about this building are the dwellings of the faculty members and the infirmary. Separate stables for cows and horses, each with additional sheds for animals requiring special attention; a modern dairy with facilities for the manufacture of cheese and butter; a pigsty; several henroosts; and a building in which the granary, the tool room, and the shops are located complete the plant.

Below are the outstanding articles of the Regulations governing the Central Agricultural Schools:²⁸

Section One.

Article 1. The Central Agricultural Schools shall be district centers for the imparting of rural instruction of a higher grade than is offered in the elementary rural schools.

Article 2. In these schools shall be imparted to the sons of community and small scale farmers an essentially practical training in the branches of agriculture, cattle raising, and the rural industries peculiar to each region, with the aim of fitting them adequately to

²⁶ In Chapingo, State of Mexico, the Department of Agriculture maintains an agricultural school of higher type, for the training of teachers and experts.

²⁷ Moisés Sáenz, *Reseña de la Ed. Pub. en Méx. en 1927*, Publ. de la Sec. de Ed. Pub., Vol. XVIII, No. 13, Mexico, D. F., p. 23.

²⁸ *El Problema Agrario en el Estado de Hidalgo*, Publ. de la Sec. de Agricultura y Fomento, Tacubaya, D. F., Mexico 1926.

cultivate and properly manage a tract of land, or a small farm, to develop it efficiently and to find the best markets for their products.

Article 3. In these schools shall be offered, likewise, the social and economic training which the country folk lack and which will fit them to organize themselves in due form for purposes of improvement, of production or consumption, of defense, etc.

Article 4. The Central Schools will initiate the pupils in the general culture necessary for efficient activity in the social environment in which they are to develop.

Article 5. The Central Schools shall establish, moreover, short courses for adult farmers and shall spread agricultural propaganda by distributing improved products and rendering service to the people. They shall perform experiments and demonstrations and establish model industries.

Article 6. The duration of the regular courses shall be five semesters, in accordance with the respective program of studies.

Section Two.

Article 7. A regular student of a Central School shall be:

- I. Son of a community farmer or other small scale farmer.
- II. Resident in the zone indicated as in the jurisdiction of the school, exceptions being permitted by authority of the Secretary of Agriculture.
- III. Over 14 and under 20 years of age.
- IV. In good health and not afflicted in any way that will incapacitate him for normal agricultural pursuits.
- V. Backed by the approval of the parent or guardian.
- VI. Recommended by the agrarian administrative committee of the community of which he is a member, in case he be the son of a communal farmer, or by the authorities and most prominent residents of the town in case the former conditions do not apply.

Article 8. It shall be the duty and attribute of each pupil to:

- I. Respect the dispositions set forth in the present Regulation.
- II. Observe whatever disciplinary measures the school authorities may dictate.
- III. Attend punctually all classes, exercises, and projects in general, in conformity with the respective program.
- IV. Be a member of one of the student cooperative societies which shall be organized, and work faithfully for its success, election being permitted according to the tastes and needs of the individual student.
- V. Cooperate in the activities of the school, protect its material and cultural interests and its good name.
- VI. Suggest to the school management whatever measures might make for more efficient practices or which might benefit the institution.

Article 9. The following shall be considered just causes for suspension or expulsion of the pupil:

- I. Failure to comply with the provisions of this Regulation.
- II. Serious moral or disciplinary offenses.
- III. Departure from the school without leave.
- IV. Habitual negligence or lack of interest in the tasks assigned.
- V. Receiving, for three consecutive months, a grade lower than "good" (bien) in agricultural courses and only "average" in the other activities.
- VI. The systematic lack of cooperation with schoolmates.

Article 31. The instruction imparted in the schools shall consist of three kinds of compulsory activities:

- a. Of general culture.
- b. Of agricultural and industrial nature, for the school.
- c. Of agricultural and industrial nature, for the pupil himself, in cooperation with other pupils.

Article 32. The students shall perform, furthermore, all the necessary domestic services, in the turns assigned.

Article 33. A student may be exempted from the activities classed as compulsory, only for a fully justified cause and on the judgment of the director of the school.

Article 34. The director of the school shall assign the agricultural tasks to the students and shall determine the schedules on which they shall work.

Article 35. The students shall receive the theory of the industrial and agricultural instruction corresponding to their needs, at the same time that they perform the practical activities assigned to them, and only when this is impossible shall they receive, at the close of the day's work, the corresponding explanations through illustrated group discussions led by their instructors.

Article 36. The assignment of "turns" for the different tasks shall be made weekly. Each group shall take charge of its functions on Monday and shall not be considered relieved of the obligations involved until it has rendered to the relieving group a detailed and complete account of the state which the activity has reached.

Article 37. On Sundays and holidays only the tasks not absolutely indispensable shall be interrupted.

Article 38. The students shall be provided with time books in which the professors and instructors shall enter the tasks which each one has performed and the time spent in their performance. The director of the school, in turn, shall keep a record of the time employed by each student in agricultural and domestic activities.

The activities of the students are divided into (1) class-work, (2) field and domestic work for the school, (3) agricultural, stock and industrial projects developed in cooperation with schoolmates, (4) social activities, and (5) physical training.

The classwork is comprised of courses in Spanish, Agricultural Arithmetic and Geometry, Geography, History and Civics, Natural History, Farm Organization and Management, Rural Improvement, and Practical Drawing. The work for the school itself consists of (1) agriculture—horticulture and gardening, fruit growing, grain cultivation, and forestry; (2) breeding and raising of domestic animals—chickens, ducks, and turkeys; goats, sheep, hogs, horses, mules, donkeys, and cows; (3) agricultural industries—dairy, canning and preservation of fruits and meats, fruit and vegetable drying, fruit packing, apiculture, sericulture, and milling; and (4) manual arts—harness and saddle making, carpen-

try, blacksmithing, repairing and assembling agricultural machinery.

The activities performed by the students for themselves are carried out through the medium of small tracts of land assigned to each by the director. The students apply the knowledge and training acquired in the service of the school to activities of various types—agriculture, animal husbandry, etc.—for their own benefit. The older and more advanced students are often assigned work as assistants to the faculty or to the administrative force, so that they may learn to manage men and acquire the concept of responsibility. Throughout the stay of the students in the school an effort is made to have them take advantage of all opportunities for acquiring social efficiency.

Lectures and conferences are held on topics relating to agricultural work, the social life of the region in which the school is located, and rural life in general. Discussion groups are held regularly for the discussion of current events in the republic, to acquaint the student with the rôle he plays in the progress of his country. Topics of general interest to the pupils, both for the present time and for the future, are also discussed. From time to time entertainments and plays dealing with regional affairs are given, with the double aim of showing a way for the proper use of leisure time and of creating a spirit of patriotism and love of the rural life.

The physical culture consists of the usual exercises and athletic games. Training in horse-breaking, riding and lasso throwing is also given. Frequent excursions are made for the purpose of providing the students with a wider knowledge of the region, especially of the important agricultural zones, and to increase their understanding of the various practices engaged upon in the school work.

As can readily be seen, these Agricultural Schools, although not maintained or controlled by the Federal Department of Public Education, are nevertheless governed by the same principles that hold in the rural and other schools maintained by this department. The desire expressed by President Calles

in 1925 that the departments of Education and of Agriculture should cooperate in the movement for the regeneration of the masses,²⁹ is being fulfilled to an increasing degree. Although the number of young Mexican country boys availing themselves of the opportunities offered in these agricultural schools is not strikingly large, some seven hundred took advantage of the offering in 1926, when the first four of these Central Agricultural Schools were founded, and the fact that the number of schools has been doubled since that time is ample evidence that the schools are providing a much-needed and desired service to a gradually increasing percentage of the population.

In the rural schools maintained by the department of Education, some measure of general and practical agricultural knowledge and training is imparted over and above the instruction in the fundamental processes, and the opportunities for participation in social activities. The Central Agricultural Schools conducted by the department of Agriculture continue the work begun in the ordinary rural schools and emphasize practical training in agricultural pursuits, in this way providing a means of securing the economic liberty and independence on which the social transformation of the rural masses must be based.

4. THE HOME FOR INDIGENOUS STUDENTS

The Home for Indigenous Students presents another aspect of the extensive campaign launched by the federal government of Mexico in favor of the Indian. First proposed in 1924 by Dr. J. M. Puig Casauranc, the founder, as an element in the political platform of General Plutarco Elías Calles, it represents, perhaps, the first instance in the history of Mexico, of an educational project having been promised in a presidential campaign and having been fulfilled after the election.³⁰ In April, 1925, the governors of the Mexican

²⁹ El sistema de Escuelas Rurales en Mex., Publ. de la Sec. de Ed. Pub., Mex., D. F., 1927, p. 19.

³⁰ La Casa del Estudiante Indígena, Publ. de la Secretaría de Ed. Pub., México, D. F., 1927, p. 31.

states were notified of the plan to erect a National Boarding School for Indians in Mexico City, and each was invited to send from 10 to 20 young natives as representatives of their respective states. The next year the name of the institution was changed to Home for Indigenous Students.

Fundamentally, the aim of the institution is to bridge the evolutionary gap which separates the native tribes from contemporary civilization, to incorporate them as a body in the Mexican social group. To this end the institute surrounds its students with the best conditions of nourishment, hygiene, wearing apparel, sleeping quarters, recreation, and other prime necessities. It equips them with a basic culture and imparts instruction and training of a manual, agricultural, and industrial character. That the Indians shall not form a separate social entity, but shall feel themselves to be necessary elements in the great national family, the students of the Home are given ample opportunity to study, work, play, and otherwise associate with the white and mestizo students of the city, and thus form bonds of interests, aspirations, and common basic aims which will be a powerful influence toward integration.

This intermingling or fusion of whites, mestizos, and Indians is further facilitated through (1) participation of the school in civic, athletic, and other joint gatherings; (2) frequent visits to cultural centers such as libraries, scientific and literary societies, lectures, museums, and public monuments; (3) attendance at selected dramatic presentations, public playgrounds; (4) excursions to shops, factories, and other industrial centers of Mexico City and the neighboring districts; (5) festivals and receptions in the plant itself or elsewhere; and (6) membership in cultural and economic societies organized by the students themselves or in similar organizations of a national character.

Another of the essential objectives of the school is a feeling of friendship and fraternity among the various Indian tribes of the country. Racial solidarity is sought, in other words, in order that these young men, upon leaving the institution, will return to their respective homes, guide their rela-

tives and neighbors to social action, and constitute a new element striving for the emancipation of the rural masses.

The boys residing in the Home for Indigenous Students are matriculated in the federal schools and industrial plants of Mexico City and frequently even in privately owned shops, factories, and business houses. In this manner they receive, along with primary and elementary academic instruction, training in one or more of the following lines: agriculture, practical arts, soap making, tanning, fruit, vegetable, and meat preserving, carpentry, cabinet making, forge and foundry work, wood and metal turning, mechanics, well drilling (especially oil), electricity, automobile mechanics, and others. In the work of coordination and cooperation which the institute aims to develop to a maximum, care is exercised to make all instruction and practical training of such nature as will permit immediate application in the actual industrial world. Each boy is obliged to perform for himself those activities relating to the care³¹ of the furniture and equipment used by him in the plant, but the authorities see to it that each boy is paid according to his abilities for the work done in apprenticeship and that each one acquires habits of work, order, organization, and economy as foundation for the struggle for existence.

Physical training identical with that offered in all federal schools is compulsory. Sports and games characteristic of the districts from which the boys have come are cultivated along with organized games such as baseball, football, volley ball, tennis, basket ball, track meets, and gymnasium work.

Discipline at first is in the hands of the home directors and assistants but a regimen is gradually developed in such a way as to involve the spontaneity and manliness of the boys themselves, in which they think and act according to their own dictates. Espionage and the iron rule of a censor are strictly taboo.

The Home for Indigenous Students housed in 1927 a total of 198 boys.³¹ Of this number 173 were receiving elemen-

³¹ La Casa del Estudiante Indígena, Publ. de la Sec. de Ed. Pub., Mexico, D. F., 1927, p. 162.

tary instruction, 7 secondary, and 18 various branches of technical or industrial training. Twenty-six different tribes were represented in the student body. Started as an experiment to determine the feasibility of incorporating the Indian in the Mexican family, to test his ability to occupy a place of equality beside his white and mestizo countrymen, this institution has definitely proved that the Indian, given the opportunity, can and will learn and use his knowledge on a par with the white man. The old saying to the effect that "a good Indian is a dead Indian" has been disproved—"the good Indian is the live Indian to whom the Mexican Department of Education is giving the opportunity to be better through liberty, work, and education."³²

Results of intelligence and educational tests have shown indisputably that the Mexican Indian possesses the same mental equipment as the white and mestizos. Compared with students in other schools of the capital to whom the same tests were administered the pupils of the Home for Indigenous Students made a slightly better showing, despite the fact that the tests were in Spanish—a foreign language to many of these Indian boys. They have thus "completely disproved the idea which the privileged classes strove to perpetuate by stereotyping the concept of the Indian race as one totally unconscious of conveniences, indolent, vice-ridden, unresponsive, subservient, slavish, mentally incapable of advancement—utterly hopeless. Before the proud, egotistic, and fatuous world these Indian youths have clearly demonstrated their praiseworthy industriousness, their incomparable morality, their racial pride, their spirit of service, their capability for unlimited progress, and their extraordinary power of adjustment to new environment."³³ The numerous successes and failures they experience in competition with classmates of the schools which they attend have made them realize that their bronze skin is no indication either of superiority or of inferiority. They have begun to recognize their

³² *Op. cit.*, p. 164.

³³ *La Casa del Estudiante Indígena*, Publ. de la Sec. de Ed. Pub., Mexico, D. F., p. 122.

own possibilities and to take advantage of them, and thereby they are justifying the interest and effort directed to them by the federal authorities.

Other schools—three in number—have been organized along similar lines in the regions of the Tarahumara Indians of Chihuahua and of the Chamulas at Chiapas. The most important, however, is the home in Mexico City. As pointed out by Professor Rafael Ramírez, head of the Rural School Department, in an address delivered July 15, 1930, during the fifth annual session of the Seminar in Mexico, these schools are very uneconomical. The desired integration is accomplished "one by one and not, as the rural school achieves it, in social masses or community by community." Nevertheless, these Indian schools have already served their purpose by proving that the native stock is capable of redeeming itself through education.

In 1927 Dr. Puig Casauranc, Secretary of Federal Public Education and Founder of the Home, recommended that additional training be given in order to equip the graduates to take efficient charge of rural schools in the communities from which they come.³⁴ Training of this character is now being given to a majority of the students, and the difficulty of finding teachers capable of speaking the languages of the various Indian tribes and at the same time schooled in the methods and procedures approved by the Department of Education has thus been partially overcome. Together with the graduates of the rural normal and the central agricultural schools, the teachers prepared in the Home for Indian Students form a dependable corps of promoters of educational expansion and social-economic reconstruction among the Indians of Mexico.

³⁴ El Sistema de Escuelas Rurales en México, Publ. de la Sec. de Ed. Pub., Mexico, D. F., 1927, p. 58.

CHAPTER IV

THE PRIMARY AND NORMAL DEPARTMENT

The Federal Government has complete control of all public education in the Federal District and the National Territories, and exercises that control in the Federal District through the Department of Primary and Normal Instruction. In 1929 this department maintained 275 urban and semi-urban elementary schools, 54 kindergartens, 12 evening schools, and 1 National Normal School—a total of 342 schools. The elementary grades are divided into three cycles or divisions of two each, the fifth and sixth being termed superior elementary. They are articulated with the kindergartens and the schools for boys under six years of age, and with the secondary schools of academic or vocational character.

The enrollment and attendance in these schools were 125,378 and 98,376 respectively, for August, 1928; and 134,447 and 120,308 for August, 1929; showing an increase in one year of over 9000 in enrollment and of about 22,000 in attendance. The existence of 269 Parents' Associations with a total membership of 47,169 is an indication of the successful results of the department's efforts to popularize public education. Seventy-six cooperative societies composed of pupils, 13 of parents, and 14 school stores were functioning in 1929. Eighty-five of the schools have little theaters in connection with them, 52 have shower baths, and 11 have swimming or bathing pools.¹

The elementary schools maintained by the Federal Government are undergoing a period of constructive revolution along with the other fields of thought and action in Mexico. Emancipation of the urban workers and rural peons is the desired goal and the pre-revolution schools were sadly inadequate for such a purpose. The majority of state and private schools of the country are still of the traditional type in which the

¹ Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, pp. 3-129.

Hербartian ideas of teacher importance prevail and education is "poured in rather than drawn out." The new schools of the Federal Department and those state and private institutions which have been influenced by them are attempting to give an active and functional education epitomized in the modern slogan "learning by doing." The project method of instruction, with all its adjuncts, was adopted by presidential decree in 1923 and has been spreading in a more or less modified form throughout the Republic under the name of "Activity School."

The two main features of the "Activity School" are (1) the observation and experiences of the child, as the means to his proper and efficient development; and (2) work in common, cooperation in school life and activities, as the means to the awakening of a brotherly spirit of mutual service for the good of society. In the newspaper "Excelsior," of Mexico City, dated November 3, 1923, the characteristics of the new school were stated as follows:

- I. The New School should be a constant pedagogical laboratory.
- II. It should be located, whenever possible, in the country where the child's spirit may find its world of observation, experience, and beauty.
- III. It should be based on action rather than words.
- IV. Observation and experience should always precede oral lessons.
- V. Individual experience should be accorded first importance.
- VI. Collective activity should be connected with individual experience to educate the child to the idea of "community."
- VII. Yearly projects, especially gardening, woodwork, and modeling, constitute an essential part of the program of the New School.
- VIII. In the New School, the breeding and care of domestic animals are a source of learning, because of the opportunity they afford for the observation of life in all its phases, and because of the systematic activities they require of the children.
- IX. Geography and History should be taught by relating what is learned by observation and experience with what man has verified in the various stages of his existence and with what actually exists in the different regions of the world.
- X. Chorus singing and music help to provide the artistic atmosphere with which the New School should be impregnated.
- XI. Physical exercises and games should be held out of doors.
- XII. Schedules and programs must be flexible, to adapt themselves to the environment, the experiences, and the needs of the child.
- XIII. Classes should be held on the field of observation and experience: in the country, the factory, the shop, the museum, etc.
- XIV. Classrooms should be real workshops in which the child investigates, works, or thinks carefully about the observations or experiences he has had.

XV. The New School should be, if possible, a boarding school in which the pupils, guided by their teachers, live as in a community.

XVI. The New School should be co-educational, to accustom the pupils of both sexes to treat each other as companions and to hold due consideration for each other.

XVII. In the New School the teacher plays the rôle of guide: only apparently is the pupil the active factor and the teacher the passive one.

XVIII. In the New School, excursions and outings are the most active means of instruction.

XIX. In the New School rewards and punishments do not exist: discipline is based on freedom of work and play.

XX. In the New School the spirit of service and cooperation supplants the spirit of struggle or of competition: brotherhood takes the place of egoism; the idea of war gives way to that of peace; violence is put aside for love.

XXI. The New School adopts the natural method of *phrases* in the teaching of reading and writing, and of *construction* as the auxiliary of arithmetic and geometry. Manual activities including the construction of pens for animals, articles of furniture, and garden plotting and making are the source of numberless problems of great interest.

XXII. In the New School the teachers are free to develop their personality and educational initiative and must be conscious of the need for so doing. There are no principals, and those in the present organization of the school system who are called inspectors (super-visors) should be real advisors. The teachers should make their own decisions and help each other concertedly.

XXIII. The New School should function in constant relation with the home and with society in general.²

This "Activity School" has the same characteristics as were noted in the Rural Schools. Education is being vitalized and socialized through it. Worthwhile activities connected with the life of the community are being introduced so that the school may influence the environment about it. The program of these new type schools has lost little with reference to the fundamental processes, but it has suppressed much of the encyclopædic content formerly found in elementary schools, in an effort to enrich its offering by a more intense, vigorous, and vital treatment of more useful materials. The aim is to give an education based on the interests and needs of the child through the performance of real activities in real situations. The influence of both Dewey and Decroly is seen throughout. The idea of "learning by doing" has led to the adoption of the project method, with a marked tendency toward the recognition of individual differences and the socialization of instruction.

² Quoted in: Boletín de la Sec. de Ed. Púb., Vol. II, Nos. 5 and 6, Mexico, D. F., 1924, pp. 294-5.

In a series of articles³ dealing with the New School in Mexico, Professor Alfredo Sánchez presents a masterly interpretation of the "Activity School" and offers a host of valuable suggestions for teachers of such schools. To the end that "learning by doing" may be truly effective, he advocates that the school lay especial emphasis on the organization of the individual and collective activities of the pupils so that they may acquire the ability of self-organization and be capable of properly reacting to whatever environment they may enter in their post-school period. Basing his work on the psychology of the Mexican adult in general, on that of the Mexican child, on the environment, on the aims set up by the Federal Department of Public Education, and on the materials and means at hand, he presents the following as a guide to teachers:

The "Activity School" is concerned with:

(1) The development of good habits of order, work, cleanliness, foresight, courtesy, individual study, care (animals, plants, objects), cooperation, helping, distribution of time and money, thrift.

(2) Motor activities leading to the provocation of knowledge and skills, the derivation of knowledge and skills, the application of knowledge and skills, physical development, the development of the constructive spirit, the unfolding of the mind, the development of the powers of observation.

(3) Mental activities having to do with the general observations of the pupils, the theoretical fundamental principles (arithmetic, geometry, language), the application of acquired skills and knowledge, notions of Natural Sciences, Geography, History and Civics, graphical representations, the development of the spirit of investigation, the application of games to learning.

(4) Administrative, social and democratic education through the organization and administration of groups, clubs, "companies," etc., class discussion of difficult points, organization of social functions and similar democratic practices.

(5) Moral education through moral examples, vigilance over pupils' conduct, provocation of healthy aspirations, and the building of character.

(6) Æsthetic culture through drawing and handicrafts, dramatization, poetry, singing, music, declamation, and the appreciation of beauty.

(7) Physical culture through sports and athletic games, physical exercises, and excursions and outings.

(8) Recreation through games (considered from the psychological point of view), parties, entertainments, walks, excursions, etc.

This outline Professor Sánchez says is intended to prevent the teacher from laying too much stress on any one aspect of

³ Boletín de la Secretaría de Educación Pública, Vol. V, Nos. 2, 3, 4, of Feb., Mar., Apr., 1926, pp. 21-28, 24-30, 36-43, respectively.

the new school. He admits that it is not complete but urges that it be kept constantly in mind as a sort of framework on which to build toward perfection by adding suggestions coming from the central office, from actual practice and experience, and from other sources.

In connection with the motor activities, the teacher is warned against going to extremes. The activities must bear some close relation to the interests and needs of the pupil and, naturally, the pupil will vary from day to day in interests and needs. It is to be remembered also that children cannot work hour after hour either mentally or physically, without rest or at least a change. Play occupies a prominent place in the elementary school but the hours devoted to it should be gradually lessened until in the last year (the sixth grade), work consumes all but one hour of the day's schedule of five hours. The pupils, by doing, learn to handle instruments, to give them their proper names, to count them, to take care of them, to compare and interpret and trace plans and sketches, to measure, and many other things; they draw their knowledge out of their various activities, apply it, and are motivated by it. The habit of *work* is inculcated together with a healthy attitude toward it, the idea that it is honorable and gives satisfaction, pleasure, and recompense.

The mental activities are closely coordinated with the physical or motor activities in so far as the possibility exists, but the fundamental processes are imparted systematically. Minimum requirements are being discussed for these as well as for the work in natural sciences, geography, and history. The projects worked out by the pupils are discussed in the class, owing to the fact that the mental associations occurring to the child frequently differ greatly from those intended by the teacher.

Through the activities involved in the administrative-social-democratic training, the Mexican child is acquainted with the functioning of society in real life. He is active in the organization of clubs, the work of committees, entertainments; he becomes a member of a cooperative society or of a school bank; and he helps edit the school paper. He acquires the

fundamental principles of mercantile operations and documents through the use of checks, receipts, shares, bonds, promissory notes, ledgers, journals, inventories. Intimately linked with these activities of administration are those of a social and democratic nature. The election of officers, meetings, and other similar joint activities afford ample opportunity for the formation of social and democratic habits and attitudes. The pupils are responsible to their fellows and to their teachers for all their acts in all connections.

The part of the activity school which aims at moral education seeks to ennoble the mind of the pupil, to instill control of the passions, both desirable and undesirable. All three classes of Mexicans—upper, middle, and lower—are led toward the same moral standard: the lower and middle classes are taught to better their lot by aiming at home improvement as regards order and cleanliness, to be clean, correct, moral, diligent, loyal citizens; the upper classes—wealthy—are shown the futility of prejudice and arrogance, the value of humility, study, work, altruism, and democracy. Activity, work, is held up as the source of all virtue.

Appreciation of the æsthetic is of particular interest in Mexican schools, especially for those pupils who come from lower and middle class homes. According to Professor Sánchez, who has traveled extensively in the United States, Mexican homes and people of the classes referred to are sadly lacking in tidiness, cleanliness, and beauty. Neglect is the outstanding note. The stores and shops are poorly equipped and the merchandise distastefully displayed and generally covered with dust. The school, he says, must look after æsthetic appreciation in all classes of the population and not only in such things as arts, handicrafts, singing, music, and poetry. The love of the beautiful must be extended to all things; and order, cleanliness, and neatness are three fundamental factors which are brought to the attention of elementary school children.

The elementary school proper in Mexico is a pre-vocational school aiming to present to the pupil the greatest number of opportunities possible and thus to arouse his interests and

guide them into the proper channels. It is not a plant that provides the child with adult experiences; it introduces him to the life of organized society—gives him the key which enables him to “learn to learn.”

The aims of the New School were expressed by Dr. J. M. Puig Casauranc, Secretary of Public Education in Mexico, in the following terms:⁴

(The Activity School proposes to create such a learning situation) that the child may live a rich and complete life of a child; that his school activities may bear a close connection with the home and the community; that he may develop a wide-awake, keen and investigating spirit; that he may observe, compare, and give true and concrete form to the motives of school work, which shall be centers of interest at his disposal for the acquisition of knowledge; that he may work spontaneously and freely; that he may enrich his culture, develop his powers and receive a prevocational preparation for the career to which his inclinations lead; that his own efforts may be the most efficient factor in his education, and that he may acquire work habits of co-operation, of mutual aid, and of constancy, which will fortify his moral character. If the elementary school is a miniature community, and if in all communities manual, motor or constructive activities constitute the predominant functions of life, it is natural that the school should initiate the child in these activities, placing him in contact with the active life about him in order that in this way he may understand it, appreciate it, and feel it according to his possibilities. Thus the child, through his muscular and mental activities, will enter the current of material and spiritual progress of the society in which he is to live and participate. Consequently, in the Activity School the active work of the pupil will constitute the means by which in the limited period of school life the child may acquire those elements which are indispensable for life in a civilized society.

The New School, properly understood and operated, obliges the pupil to do such work as will arouse his initiative and his energies. It attempts to give him confidence in his own powers by revealing to him the worth of his own personality. It accustoms him to observe, to the end that by his own acumen he may avail himself of everything that his environment may offer for his benefit. It fosters habits of work and order; it familiarizes him with the manual activities related to industry and agriculture. It places him in contact with the multiple activities of the school, making him see the problems with which he will sometime be faced, and aiding his vocational inclinations to become defined. It socializes its activities so that the pupil may be initiated into practices of cooperation,

⁴ Boletín de la Sec. de Ed. Púb., Vol. IV, No. 7, Mexico, D. F., 1925, p. 74.

of mutual aid, of the division of labor, of a "director of energies" in the most widespread service of society.

The textbooks employed in the activity school are as a general rule especially prepared under the direction of the Federal Department of Public Education. Readers, geographies, and histories form the bulk of textbook material for this new school. They are supplemented to a very great extent, however, by books of all sorts, by newspapers and magazines which in the opinion of the teacher can be used successfully as a motivating agent for the activities of the school. Children's libraries have been instituted in all the federal elementary schools and are augmented constantly through private donations, the Federal Department of Libraries, and the Department of Publications.

Ten months generally comprise the elementary school year, vacations coming either in December and January, or in July and August, according to the climate. Some of the Federal schools divide the long vacation period in two and have one month in the summer and another in the winter. There is also a week of vacation at Easter and another in September. In most states the school day consists of five hours distributed in morning and afternoon sessions. Mexico City and several other of the larger cities have one session only, from eight in the morning to one in the afternoon. A considerable number (about one-third) of the capital city's schools have two shifts, and many others (over one-fourth) have adopted the platoon plan by which two or three groups work in the shops, the gymnasium, the gardens, while others occupy the classrooms, and after a specified period of time the groups exchange places. In this way the school building and the grounds are kept in constant use and it is estimated that a saving of at least one-fourth is made in the number of teachers required.

Another interesting type of school with which the Federal Department of Public Education is experimenting is the so-called "open air school." These are established preferably in the most congested parts of the city. Besides having ample playground space they have the characteristic of being open on one or two sides. Equipped for the "activity" type of

instruction, the open air school not only provides an ultra-modern education in a pleasant and hygienic atmosphere but it also presents a constant object lesson to the neighborhood in what the government schools are doing for the children.

The façade and at least one of the interior walls of each school of this type have been decorated by an outstanding Mexican artist,—the power and solidity of the new art being ably represented in these symbolic murals of native legend. Common annexes of the open-air schools are shops, shed, and inclosures for animal breeding, shower baths, (in several, swimming pools), playgrounds, flower and vegetable gardens. All activities are carried on in plain view of the street, so that the public is able to see from without what is going on in the school. This openness has been most salubrious for the pupils, and at the same time has stimulated the public to heightened interest and cooperation in the work of the school and thus indirectly in the other activities of the federal government tending toward cultural enlightenment. The cost of these schools ranged from approximately \$12,000 to \$42,000 each, bespeaking an average which, in consideration of the far-reaching advantages that have accrued, is an almost negligible amount.

In 1927 eight schools of this type, with 94 teachers and an enrollment of 5540 pupils, were functioning in Mexico City.⁵

TEACHING STAFF

In 1925 a study was made of the qualifications of the teachers employed by the Federal Department of Public Education in the Federal District, according to previous preparation, experience, teaching ability, and collateral study in professional subjects since the inauguration of the present educational program. The personnel concerned with the teaching process was divided into various groups and classifications,⁶ to which corresponding salaries were assigned. A striking departure from common Latin American practice

⁵ Sáenz, M., *Reseña de la Educación Pública en México in 1927*, Publ. of the Sec. of Ed. Pub., Vol. XVIII, No. 13, Mexico, D. F., 1928, p. 12.

⁶ These data in full are in the original study at The Johns Hopkins University.

has been the regular and full payment of its teachers' salaries by the Mexican federal government.

The minimum amount of professional work for any inexperienced or new teacher is: one subject of technical character in an official industrial school and another of professional character in the higher normal school of the national university, or two professional subjects in this latter school. The requirement for promotion based on courses taken during the year, for those teachers actually in the federal service, is the successful completion of at least three professional subjects. The minimum requirement of academic subjects in the secondary division of the Normal School (for seventh and eighth class elementary teachers) is the successful completion of at least four courses.

The Department of Education with the aid of the Teachers and Employees Union of the Federal District is at present considering the means of putting this scale and the order and requirements for promotion on a more objective basis.

In addition to the service and salary scale already treated, the teachers employed by the Federal Department of Education enjoy the benefits of laws providing for pensions and retirement, for tenure of employment, and for insurance.

The Pension and Retirement Law,⁷ in force since 1925, protects not only the teachers but also all civil employees of the Federal Government. According to this law the pensions depend on factors of age, time in service, and the average salary of the five years immediately preceding retirement. It establishes 70 years as the age for compulsory retirement, 55 years as the minimum age at which a pensioned retirement may be granted, and 15 years as the minimum term of service to insure pensioning. It also provides pensions for disability. The retirement pension amounts to one and a half per cent of the average salary received during the last five years of service. A bonus of 25% of this result is added for teachers. The disability pensions are of two kinds: for disability incurred in the service, one-half of the salary received at the

⁷ Boletín de la Secretaría de Ed. Púb., Vol. IV, No. 7, Mexico, D. F., 1925, pp. 5-70. (The text of the Law, its subsequent modifications, and detailed discussions of its provisions are presented in this number of the bulletin.)

time the disability occurred is paid; for disability incurred otherwise, 1% of the average salary for the last five years, multiplied by the number of years in the service. The pension fund is formed through obligatory fees collected from all government employees according to their ages. From this fund small loans in cash are made to the employees in cases of emergency, and mortgage loans for larger amounts are granted for the building of homes or the establishment of small factories or the consummation of business deals.

The Teacher-Tenure Law⁸ dates from December, 1926, when its provisions were decreed by President Calles. This regulation guarantees permanence of employment of all teachers and other personnel of the Education Department included in the service scale already discussed, and of other teachers and officials in the employ of the Department, when they shall have become classified in the same or a similar scale, provided their conduct shall conform to the standards set by the Federal Department of Education. In any case, teachers may be separated from the service only upon conviction at the hands of a jury composed of their peers and school authorities.

The Insurance Law⁹ was decreed by President Calles in November, 1928. It provides for pecuniary aid to the survivors of teachers and other employees of the Department of Education who are members of the Teachers' Insurance Company and have not permitted their premiums to lapse. The Company is composed of and controlled by the teachers themselves and housed in an office of the Department of Primary and Normal Instruction. When a death occurs, one peso is collected from each member and paid to the beneficiary designated by the deceased. An emergency fund is provided, also, to take care of the possibility of two or more deaths at close intervals. This fund is formed by the collection of one peso from each member and is replenished, when necessary, by a repeated collection. Notwithstanding the fact that before the issue of the decree the project was unfavor-

⁸ Boletín de la Sec. de Ed. Púb., Vol. VI, No. 1, Mexico, D. F., 1927, pp. 15-23.

⁹ Ibid., Vol. VII, Nos. 9, 10, 11, 12; 1929, pp. 209-217.

ably regarded by many of the teachers, it has since been accorded unanimous approval, and teachers not in the federal service are now soliciting membership in the society.¹⁰

Teacher training is carried on by the Federal Department in Mexico through the Higher Normal School or Teachers College which is a part of the National University intended to prepare normal graduates for principalships and supervisory positions and for professorships in the secondary, preparatory, professional, and normal schools of the Federal System; through the National Normal School in the Federal District, which prepares elementary and kindergarten teachers; through 10 rural normal schools in the States; and through the Normal and Preparatory School in the Territory of Baja California Norte.

The Higher Normal School is conducted in conjunction with the Faculty of Philosophy and Letters of the National University of Mexico. Of the 1169 students in the combination in July, 1929, there were 567 enrolled in the Normal.¹¹ Graduation from the National Preparatory School or from the National Normal School or from other preparatory schools in the States which fulfil the requirements fixed by the Federal Department of Education constitutes the entrance requirement to this School. Advanced courses in Education and others in the Faculty of Philosophy and Letters, together with a thesis, lead to the degree of Profesor Universitario (Secondary School Teacher) in three years of study; to Master of Philosophy in one year more; and to Doctor of Philosophy in two years more. For the certificate of school principal, a specified group of courses and a thesis are required, and for a certificate of school supervisor, another group of courses and another thesis are required in addition to the certificate of Principal.¹²

¹⁰ Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, p. 10.

¹¹ Memoria que indica el estado que guarda el Ramo de Ed. Pub. el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, p. 265.

¹² Bulletin No. 12 (Educ.) Pan Amer. Union, Wash., D. C. "Teacher-Training Courses in Latin America" U. S. Gov. Print. Office, 1929, p. 31.

The National Normal School was formed in 1925 by the fusion of three Normal Schools (la Normal Primaria para Maestras, la Normal Primaria para Maestros, la Normal Nocturna "José María Pino Suárez"), which had existed up to that time in Mexico City. It is co-educational and divides its offering in two cycles, a secondary and a professional, ordinarily of three years' duration each. The enrollment in 1929 was 2403 students, of which 1432 were in the secondary division and 971 in the professional.¹⁸ Graduation from the 6-year Federal Elementary School and the age of 13 years are the entrance requirements. The curriculum is as follows:

Subjects	Periods a week by years					
	Secondary Division			Professional Division		
	I	II	III	IV	V	VI
Spanish	3	3	2	3	..	..
Mathematics	3	3½	3½	..	..	..
Natural Sciences (Botany; Zoology; Anatomy, Physiology, Hygiene; Biology; Physics; Chemistry.)	3	7½	7½	3	..	..
Geography	3	3	..	..	3	..
Cosmography and Meteorology	..	..	..	3	..	..
History	..	3	3	..	..	3
Economics	..	..	I	..	..	..
English	3	3	..	..	..	..
Philosophy	..	..	..	..	..	3
Educational Psychology	..	..	..	3	3	..
Principles of Education	..	..	..	..	3	3
History of Education	..	..	..	..	..	3
Educational Sociology	..	..	..	..	3	..
School Hygiene	..	..	..	3	..	..
School Organization and Management	..	..	..	..	..	3
Practice Teaching	..	..	..	4	6	10
Music	I	I	I	I	..	..
Drawing	3	3	3	..	..	..
Modeling	..	..	I	..	..	..
Physical Training	2	2	2	2	2	2
Minor Industries (Applied Chem.)	..	..	..	4	3	..
A Trade (domestic science, handiwork and child care, for girls)	..	..	3	2	2	..
Agricultural Practice	..	..	..	2	3	2
Total	21	29	27	30	28	29

The secondary cycle is identical with that of the National Preparatory School, and students finishing the secondary

¹⁸ Boletín de la Sec. de Ed. Púb., Vol. VIII, No. 8, Sept., Mexico, D. F., 1929, p. 22.

cycle of this latter school may enter the professional division of the Normal, should their inclinations be toward a teaching career. The methods applied in the teaching of all subjects are essentially active: as soon as the general principles are mastered by the students, they themselves apply them in practice-teaching and thus evolve their own individual "modus operandi" in conformity with the principles of the activity school. This professional practice work is performed not only in the demonstration school connected with the normal, but also in the primary schools of the Federal District. The regular courses are supplemented by short extra-curricular courses and lectures.

The students participate actively in the government of the school and have formed the following organizations: the Students' Cooperative Republic, the Professor-Student Society of the Night School, the Cultural Society, the Society of Pedagogical Research, the Alumni Club, the Popular University, the Normal Athletic Club, and the Salvador Díaz Mirón Literary Society. A large students' orchestra and a glee club have been organized every year; a sewing room to which hundreds of women in the neighborhood come to do embroidery, machine sewing, cutting and fitting, has been opened; a \$10,000 printing press is operated regularly by the students; a photograph studio has been installed for the use of the school; a Sanitary Brigade has been formed by over 100 students; a lunch service and a students' supply store are managed by the students; a botanical garden has been started and is maintained according to the principles studied in the botany courses; a well-equipped gymnasium has been established; and adequate provision has been made in regard to implements for the agricultural activities.¹⁴

In addition to the primary demonstration school with nearly 2000 pupils, there is also a kindergarten in which about 350 children are enrolled. A two-year professional course is offered after the completion of the secondary cycle, for the preparation of kindergarten teachers whose practice-work is done in the kindergarten annex.

¹⁴ Bol. de la Sec. de Ed. Púb., Vol. V, No. 5, May, 1926, Mexico, D. F., pp. 61-71.

The National Normal School also maintains a night school for the benefit of those teachers in the federal service who desire additional study for purposes of promotion, and offers a special two-year course in the professional cycles for the preparation of "Home-Visitors." In 1929, 639 students took advantage of the courses offered by the evening department.

The faculty of the school has been carefully selected and is composed of full-time professors who receive 21.00 pesos (\$10.50 U. S. Currency) a day, and of part-time teachers who receive 16.00 pesos (\$8.00 U. S. Currency) a day, for their services.¹⁵

The work of the Rural Normal Schools maintained by the Federal Department of Public Education in the states has already been treated in connection with the Rural Schools. The curriculum offering is as follows:¹⁶

Subjects	Hours a Week by semesters			
	I	II	III	IV
Spanish	6	5	3	3
Mathematics	6	5	..	..
Natural Sciences	6	3	9	..
Geography, History, Civics	4	3	..	5
Physical Training and Singing	5	5	5	5
Rural Crafts and Industries	9	10	10	10
Educational Theory and Practice	..	5	9	9
Social Gatherings	3	3	3	3
Total	39	39	39	35

The Normal and Preparatory School of Mexicali, in the Northern District of Baja California, was founded in 1927 to provide a secondary school for that district, to diminish the stream of emigration of young folk to foreign countries, and to other parts of Mexico, to prepare efficient teachers who will be capable of continuing the educational and cultural progress of the district, to promote the minor industries, the learning of a trade or occupation, and the betterment of home, economic, and social conditions. Entrance requirements are successful completion of the elementary grades and good character.

¹⁵ Mem. que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1926, Mex., D. F., pp. 19-22.

¹⁶ Ibid., Vol. X, No. 18, pp. 38-9.

Since the year 1925 the schools of Baja California Norte have been maintained entirely by funds of the district but the Federal Government approves the budgetary allotments and its policies in the educational field have been most efficiently carried out in this Territory. The normal and preparatory school, while funded strictly by the district, is an outgrowth of the new educational movement in Mexico and forms a part of the federal program. It offers a five-year course very similar to that of the National Normal School.¹⁷

Supervision in the Federal Schools.—In Volume I, Number 4, of the 1923 Bulletin of the Secretariat of Public Education in Mexico, José Vasconcelos, then the Secretary, outlined the qualifications, duties, and privileges of the inspectors or supervisors of the Federal Schools. Defining supervision as the “bond of union between the administration and the schools,” he stated that it was designed to promote the progress of the schools and to secure all information necessary to show the existing conditions and indicate the steps to be taken to insure the greatest efficiency in the teaching process.

Requirements for Supervisory Officer.—The requirements for the position of Supervisor are as follows: The applicant must be a teacher holding a certificate from an official Normal School; he must have at least five years of satisfactory teaching experience or show successful completion of certain prescribed educational courses in an institution of higher learning; and he must be physically, mentally, and morally sound. Supervisors of special subjects are required to have had thorough professional training in addition to extensive work in the subject of specialization.

Duties.—The duties of the Mexican school supervisor may be grouped under the following heads: (1) visitation, (2) conferences, (3) preparation of courses, (4) demonstration, (5) professional spirit, (6) placement and control of teaching staff, (7) pupil activities, (8) exhibitions, (9) supplies, (10) reports.

¹⁷ Quiroz Martínez, M., *La Educación Pública en el Distrito Norte de la Baja California*, Mexicali, Mexico, 1928, passim.

It is the duty of every supervisor to see that the laws, regulations, and orders of the Administration are carried out to the greatest possible extent. He must visit all the schools in his district as frequently as circumstances permit, and leave written and signed observations and suggestions in the register each teacher has for that purpose. The visits are to be of sufficient length to permit the supervisor to make his influence felt in all school activities—several days if necessary—and to afford him an opportunity to see how his suggestions are applied and what result their application brings.

Conferences are to be held with teachers and principals, individually and collectively, to the end of preserving and increasing efficiency in teaching and thus promoting pupil growth. The initiative of the teacher is to be respected and encouraged but every effort must be made to unify the criterion of the profession in the scientific educational principles which serve as the basis for modern instruction. The teachers are urged to express their opinions freely in the presence of the supervisor, and to feel that he is a friend who has come to lend assistance wherever needed. Both teachers and principals are encouraged to communicate at any time with the supervisor, verbally or in writing, anent the problems arising in their work. He helps them prepare the detailed courses of studies for the divers subjects and gives demonstration lessons on the principal points of the program, particularly on those in which deficiency has been noted, in order to show the possibilities of realizing the new ideas which they suggest. In these conferences, as in the regular monthly teachers' meetings, the supervisor is to make himself the inspiration, the guide, and the staff of the teacher. He is to bear himself in such a manner that his presence will be desired in the classroom and his advice and aid sought at all times.

The monthly conferences are for the discussion, primarily, of ways of correcting deficiencies observed in the teaching process, new pedagogical practices, and the guiding principles advocated by the Federal Office. Ten days before the date of the conference the supervisor must obtain the sanc-

tion of the central office in regard to the date, the place, the topics to be discussed, and the admission of any outside personage of acknowledged competence in school affairs to take part in the proceedings.

At the beginning of the school year, eight days of conferences are to be held in which the supervisors are to set forth the criteria that are to guide the year's work, the aims of each subject or course of studies, the general means of achieving these aims, the textbooks to be used, and the reference books to be employed by the teachers for the improvement of their professional abilities. Two days of this period are to be devoted exclusively to the principals, to give them assistance and suggestions in connection with their work. Meetings are encouraged among teachers of similar groups to discuss from time to time the different points of view held and to harmonize the work to be performed. A copy of the minutes of each conference or a clear, precise summary of the proceedings prepared by the supervisor is to be sent to the central office within three days. As a re-enforcement to these conferences and to further the spirit of cooperation and mutual assistance among the personnel, the supervisor is to hold social meetings from time to time and thus build up a real *esprit de corps*.

The "placement and control" duties of the supervisor in his relations with the teachers and principals of his district are as follows: (1) to propose the teaching personnel he considers best for his district and to suggest discharges, promotions, leaves of absence, fines; (2) to make exchanges of teachers, during the first two months of the school year, from one school to another for the good of the service; (3) to act as judge in a sort of summary court in all differences arising among the teachers; (4) to suspend teachers who commit serious misdemeanors, drawing up a brief of the occurrence and reporting it immediately to his superior; (5) to suspend up to five days, teachers whose conduct necessitates such action; (6) to grant leaves of absence up to three days when a valid reason is advanced; and (7) to set the dates, appoint the examiners, and visé the schedules pre-

pared by the principals for the various tests and examinations prescribed from time to time by the Administration.

Supervisors are free to initiate, in conformity with the educational principles and tendencies approved by the Federal Department, any reforms or movements which may redound to the improvement of the schools of their districts. They may start and encourage among the pupils the organization of athletic leagues, libraries, clubs, savings bank service, or any other joint activity likely to promote a spirit of interdependence and cooperation among the pupils and in this way lay the foundation for improved conditions in the future of the community. Supervisors likewise work to arouse the interest of the parents in the education of their children and thus to create and sustain an intimate relationship between the home and the school. To this end, meetings are frequently held in which parents, teachers, and supervisors come together to discuss different phases of the school's activities and objectives and their bearing on the life of the community. Numerous exhibitions of pupils' work are opened and parents are urged to attend and offer assistance and suggestions for future activity in the school. Great strides are being made in this way in overcoming the apathy of adults toward the public school and the necessity for universal education which was so prevalent under the earlier systems of instruction in Mexico.

It is also the duty of the supervisor to take charge personally of the selection and delivery of supplies and equipment for the various schools in his district, especially in the case of those articles for which there exists an immediate need. His approval must be secured for all programs of school excursions. His signature must be attached to all school documents whose validity requires his sanction. And he must personally take active part in the "ceremony" connected with the dedication of all new schools in his district and sign the official documents appertaining to the occasion.

Each month the supervisor is required to submit to the Director of Federal Education in the state or territory in which his district is situate, a report including, in addition to

the regular supervisory activities, the following points: (1) the degree of progress of the different groups in relation to the courses of study; (2) suggestions and instructions given in connection with class management, discipline, work habits, morality, and the cultivation of the æsthetic; (3) suggestions and instructions given in connection with hygiene and physical education, with remarks expressive of the improvement their application may have produced in the health and physical development of the pupils; (4) an evaluation of the methodology employed by the teachers.

At the close of each scholastic year he must submit a detailed report of what has been realized in each school. This should include (1) a study of the sanitary conditions of the school buildings, the school yards, the furniture and equipment, the water supply; (2) a thorough and unbiased appreciation of the general professional attitude and ability of the teaching body; (3) the special aptitudes of the teachers along definite lines; (4) the names of pupils who are outstanding because of positive or negative qualities, with expository observations; (5) entertainments, excursions, and special activities; (6) statistical data which may affect the plans of the Department. In this annual report the supervisor is to propose the reforms which in his opinion should be introduced the following school year, and any discontinuance, addition, or modification deemed advantageous for the improvement of instruction and the increase of pupil growth.

The Mexican supervisor is the representative of the Secretary of Public Education in his district, immediately responsible for the proper functioning of the schools; therefore he is vested with the confidence, authority, and liberty of action necessary for the successful performance of his most important duties.

Since September, 1928, the Federal Department of Education has been endeavoring to perfect a method of measuring the work of its supervisors by a statistical evaluation of their multiple activities.¹⁸ After a year of study and investigation

¹⁸ Memoria que indica el estado que guarda el Ramo de Educación Pública en México el 31 de agosto de 1929, Publ. de la Secría. de Ed. Púb., Vol. XXII, No. 4, México, D. F., pp. 6-8.

it was believed that a truly scientific instrument had been evolved. The functions of the supervisor were grouped under three major headings, namely: Visitation, Activities, and Materials. A set form was prescribed for the reports submitted by the supervisors, so that the same information could be obtained from each one and tabulation thereby greatly facilitated.

Under Visitation, data were requested pertaining to the number of visits and their distribution per school grade. The heading Activities called for detailed information concerning conferences with teachers and principals, circulars, committees, research, publications, social functions, professional improvement, administrative affairs. Under Materials were such items as textbooks, new buildings, expositions, excursions, classroom procedure in different grades, subjects and divisions of subjects, hygienic conditions, professional items relating to recreation, psychology, educational principles, methods, tests and examinations, class management, programs, schedules, discipline, moral education, parent-teacher associations, environmental factors of school and community, complaints, cooperative stores, savings service, and numerous other items with which the supervisor has to deal.

All reports furnished the central office with data relating to each of the three main divisions of supervisory functions. They did not, however, all contain reference to all of the subsumed minutiae. The number and distribution of visits, the activities, and the matters handled during the month varied among supervisors and in the case of the same official, from month to month. In the last analysis, however, over an extended period of time, practically all engaged in identical activities and concerned themselves with very similar matters. Consequently after long and careful study of all the reports of all supervisors over a period of several years, the Department of Primary and Normal Instruction succeeded in preparing a table containing the representative activities of the supervisors and the numerical value attached to each, as calculated from the statistics gathered from the above-mentioned reports. The numerical values were computed accord-

ing to the frequency of each of the items appearing in the reports studied and the relative value of the item as determined by competent authorities in contemporary educational theory and practice.¹⁹

The measurement of the work accomplished by the supervisory body as a whole and by each supervisor individually was to be effected objectively through the instrumentality of this activity-value table. It was realized that the table itself lacked true scientific precision: the activities included were not exhaustive, their frequency of appearance in the reports would not necessarily constitute a fair measure of their relative values, and the method employed in weighting them was doubtless more or less arbitrary. Moreover, there remained the problem of determining the number of points to be considered indicative of supervisory efficiency under each of the subdivisions of the table. The table was given a short trial and then abandoned. The inaccuracy and indefiniteness of the entries made on the reports, together with the difficulty of verifying them to any satisfactory extent, proved them to be purely subjective, and, consequently, arbitrary and highly inadequate for the purpose in hand.²⁰ The Department of Primary and Normal Instruction is at present conducting a study from which it hopes to evolve a usable instrument for the objective measurement of the work of its supervisors.

For the professional training of supervisors the National University of Mexico at Mexico City offers a group of special courses in its summer session. As given in the summer of 1926 these courses were: ²¹

I. *Principles of Education* (5 hours weekly). This course included the following lectures: five in Biology, five in Sociology, four in Ethics, and six in Applied Psychology.

II. *Rural School Organization* (10 hours weekly).

III. *The Technique of Supervision* (3 hours weekly).

IV. *Scientific Methods of Ethnic Investigation* with respect to the indigenous tribes of Mexico (2 conferences weekly).

¹⁹ A portion of this table is given in the original study at The Johns Hopkins University.

²⁰ This information is contained in a personal communication to the author from Professor Rafael Ramírez, Head of the Department of Rural Schools, Mexico, D. F., October 20, 1930.

²¹ Bol. de la Sec. de Ed. Pub., Vol. V, No. 7, Mex., D. F., pp. 177-8.

V. *Social Organizations*: their significance, formation, and management (2 hours weekly).

VI. *General and School Hygiene* (2 hours weekly).

VII. *Physical Education* (5 hours weekly).

VIII. *Extra-curricular Activities*: excursions, social gatherings, and others.

In 1927 there were 151 supervisors of Federal public schools. Twenty-nine of this number served in Mexico City and the Federal District; the remainder in the schools in the States. As a general rule the work of these supervisors is concerned with all phases of school work, but there are a few special supervisors for drawing, manual arts, music, and vocational subjects.²²

The creation, in 1928, of the Department of General Supervision for the schools of the Mexican Republic was the outcome of a strong desire to inculcate a pedagogical-social consciousness in the teaching body of the country, to urge all social forces to cooperate directly and extensively in the foundation and maintenance of schools and in their own betterment, and to coordinate the educational activities of the Federal government with those of the several states. During the eight months immediately following the creation of the new Department, important and promising results were obtained. Nineteen of the 28 states constituting the republic, together with the Federal District and the three territories, are now responding nobly to the work of the supervisors and the cause of education. As a consequence, positive manifestations of social, national, and revolutionary unification are evidenced among the teachers; the organizations of country folk, of workingmen, of students, of members of the professions, have begun in a most promising manner to join forces in the great cause of culture and improvement in general; and the state governments have initiated movements to stimulate, facilitate, and support the development of these democratic tendencies.

²² Moisés Sáenz, *Reseña de la Ed. Pub. en México en 1927*, Publ. de la Sec. de Ed. Púb., Vol. XVIII, No. 13, Mexico, D. F., 1928, p. 9.

CHAPTER V

FEDERAL SECONDARY SCHOOLS

Prior to 1917, Secondary Education in Mexico consisted entirely of preparatory work for entrance into a university. The institutions offering this form of instruction were termed Preparatory schools—the most important one being the National Preparatory School in Mexico City, conducted in connection with the National University. More or less similar schools were maintained in all of the 32 states and territories of the republic. Requirements for admission were the successful completion of the superior primary instruction, good health, and the ability of the parents to pay the tuition and other necessary fees.

The type of instruction offered in these schools was regularly poor. It was extremely formal and unscientific. Its program of studies was totally inadequate to the needs and demands of modern life. Its great unpopularity is attested by the fact that many parents who could afford to do so put the primary instruction of their children in the hands of private tutors and then sent them to Europe or to the United States for their secondary and collegiate education.

The teachers in these schools, with a few exceptions in each school, were business and professional men of the community who would lecture one or two hours a day on their particular forte, employing an expository method more or less lightly sprinkled with questions and interrupted from time to time by class exercises. The positivistic philosophy¹

¹ The positive philosophy of Auguste Comte exerted considerable influence in Latin America, particularly in secondary and higher education. When Mexican education was freed from the control of the Church the dogmatic teachings of religion were supplanted by the methods of modern science. Shortly afterward, positivism found its way into the country through the works of Comte and his followers. Not only were the sciences to occupy a prominent place in the curriculum, but social evolution and progress were to come about through the unification of the whole field of science—through the systematic co-ordination of human knowledge. Immutable laws, like those governing

which governed these schools caused most stress to be placed on the sciences but the instruction was verbal and theoretical and so, fruitless. The physics and chemistry laboratories, for example, were rather for demonstration by the professor or for the repetition by the students of some imitative manipulations, than for true experimentation. Physical education was based on gymnastics and calisthenics, with no attempt at organized games and sports.²

Since 1917, however, a gradual change has been taking place in these preparatory schools. From institutions conducted solely for the benefit of the privileged minority who intended entering the professions they are becoming true secondary schools whose aim is to serve first the community that maintains them and after that, the professional minority. Educational leaders in Mexico, conscious of the fact that the revolutionary principles which have guided the governments since Diaz' time should have their most faithful expression in the schools, are exerting every effort to open wide the doors of knowledge and opportunity to those of the masses who desire to "carry on" after completing their primary instruction.³ Following the re-organization in 1926 of the National Preparatory School in Mexico City, preparatory schools throughout the nation are slowly modernizing their programs and methods.

Thus it is that in Mexico today we find two distinct types of secondary schools: the traditional, which offers a prescribed course, usually of five years, preparatory to admission to the professional faculties of the universities; and the

the physical sciences, also governed social science. These laws constituted the intellectual foundation of the brotherhood of man. Intellectual development, therefore, was the key to social progress, and knowledge became the aim of education, which soon became as stereotyped and formal as before. Due to existing social and economic conditions, the result was an education for the élite. The *Boletín de la Secretaría de Educación Pública*, Volume V, No. 2, 1926, Mexico, pp. 29-49, contains an excellent and detailed discussion by Dr. José Torres, of the influence of positivism in Mexico.

² M. Sáenz, *Res. de la Ed. Púb. en Mex. en 1927*, Publ. of Sec. of Pub. Ed., Vol. 18, No. 13, Mex., D. F., 1928, p. 17.

³ Prof. Andrés Osuna—*Informe de las labores educativas en las escuelas del Distrito Federal durante el año de 1917*, Feb. 1928, Mexico, D. F., pp. 39 ff.

reformed or new type, which is ordinarily divided into a three-year secondary cycle (required of all pupils) and a specialized cycle of two or three years of work leading to admission into a university or a professional school. In Mexico City the preparatory cycle of the National Preparatory School continues under the direction of the National University but the three-year "common-to-all" division has been located in separate buildings and a special Bureau of Secondary Education⁴ has been formed for administrative purposes. Thus secondary education has been declared independent of the university and, at the same time, independent of although articulated with the department of Primary Instruction. In other words, it has come to be recognized as worthy of a personality of its own.

Since this new department of Secondary Education has been in existence, noteworthy progress has been made in the field of secondary education. In 1923 only one official secondary school was functioning in Mexico City; today there are six, all filled to capacity and offering complete three-year programs. A presidential decree⁵ dated November 26, 1926, permits the incorporation into the Federal System of all secondary schools of the country which comply with certain requirements.

Before the issue of this decree, private school students desiring to enter the National University were obliged to pass an examination in the National Preparatory School in each subject offered by that institution, regardless of the school in which the preparatory work had been done. Work completed in the official state preparatory schools could be confirmed by certificate in the National University, but the latter institution exercised the right of questioning the certificates and of demanding verification by examination in subjects it held to be lacking or of unsatisfactory grade. The reorganization effected in 1926 provided a system of standardizing and accrediting secondary school subjects throughout the Republic. In the words of Moisés Sáenz, then Under-Secretary of Public Education in Mexico, this new system is "based on the

⁴ By presidential decree, Dec. 22, 1925.

⁵ Boletín de la Sec. de Educación Pública, Vol. V, No. 12, Mexico, D. F., 1926, pp. 408-421.

principle of examining the machine rather than the product: that is to say, the school rather than the pupil."⁶

The new bureau of Secondary Education was created especially for the purpose of extending and improving secondary education in all Mexico, through the stimulating influence of the federal Department of Public Education. In the decree of 1926 above mentioned appear the requirements and conditions upon which the bureau is basing its extensive movement for standardization and accrediting of secondary schools. Although there are no restrictions on the establishment of secondary schools in Mexico, only those conforming to the requirements laid down in the decree enjoy the rights and privileges of membership in the system of accredited schools.

According to the decree, completion of the six years of elementary instruction must be required for entrance in an accredited secondary school—federal, state, or private. The offering must lead to a "general" preparation for further study or for life's work. Thirty-six weeks of actual classwork per year, 50-minute class periods (100-minute periods for shop and laboratory), a maximum of six periods per day per student—are the requirements concerning the disposition of time within the school year. Teachers must be paid at least 45 pesos per month for each three hours of work per week, except in the case of a teacher in charge of two or more subjects, when the minimum is 30 pesos for each three hours weekly. The minimum for full-time instructors is 180 pesos per month. The teaching load may not exceed five hours per day nor 26 hours per week and the work of an instructor who teaches more than one subject must be in related fields. All teachers except those of special subjects like drawing, manual training, and physical education, must either hold a certificate or degree from the Higher Normal School or a recognized university or have passed an official competitive examination in the subject or subjects to be taught or have been declared "qualified," by a two-thirds majority of the Academic Council of the school concerned, to be a member of the teaching staff. Principals are required to hold a certifi-

⁶ *Reseña de la Educación Pública en México en 1927*, Publ. de la Secría. de Ed. Púb., Vol. XVIII, No. 13, Mexico, D. F., 1928, p. 19.

cate or degree acceptable in the judgment of the Secretary of Public Education.

Buildings of accredited secondary schools must be so constructed as to conform to hygienic requirements relative to lighting, temperature, and ventilation; they must contain a sufficient number of classrooms, capable of seating 45 students, to accommodate the entire student body; and they must be equipped with gymnasium, library, laboratories, shops, athletic field, and bathhouse. The laboratories must be adequate for the respective science. Libraries must be within easy access of all departments, adequately illuminated and ventilated, conducted by a professional librarian, stocked with the books, magazines, and other reading matter necessary for secondary school work, and have a reserve fund for constant renovation and enrichment. Libraries in institutions of less than 500 pupils must have seating capacity for at least 25; those of over 500 pupils must accommodate at least 40.

Credit for work completed in schools which have not met the requirements may be granted by the Department of Education, examinations corresponding to those of the accredited institutions being required. It is necessary, however, that these schools be registered in the Federal Department of Public Education; otherwise, their graduates are not considered eligible for the examinations. No credit may be extended for work done in institutions which prepare for the ministry, regardless of the denomination.

As a check-up on the foregoing requirements, as well as on the efficiency of instruction offered, the Bureau of Secondary Education exercises supervisory control of all accredited schools. The expenses of this body are borne proportionately by all schools receiving the service, according to the number of pupils per school. For this purpose, the incorporated schools are divided into three classes: those having fewer than 200 pupils, those having more than 200 but fewer than 400, and those having over 400. The inspectors or supervisors investigate schools desiring to be admitted to the system, render annual reports concerning each of the schools already incorporated, and have the right to visit all classes as often as

they deem necessary to secure efficiency in the educative process.

During the year 1929-1930, in addition to the six secondary schools in Mexico City, nineteen incorporated schools functioned under the direction of the Federal Department of Education. Moreover, according to the Under-Secretary of Public Education, a considerable number of the State schools are making an effort to meet the requirements necessary for incorporation, which would seem to indicate that the standard established by the Federal Bureau of Secondary Education will serve as the pattern for secondary instruction throughout the republic and will in this manner foster its development.

The total enrollment in all of these schools amounted to 7671 students, of whom 5543 attended the schools of Mexico City. In addition to their professional university or normal certificates over 75% of the secondary teachers in the capital city have had several years of secondary teaching experience and advanced study in their specialty, in the Faculty of Philosophy and Letters of the National University, in the Higher Normal School, or in foreign universities, and a majority of them are pursuing special courses at the present time.⁷

On October 25, 1927, Professor I. L. Kandel of Columbia University, lecturing in Mexico City on the "Secondary School Principal," declared that one of the most important functions of a principal is to help the teacher to know himself—not through the old-type supervision, the imposition of the will of the principal upon that of the teacher, but through cooperation in helping him understand and overcome the problems that he encounters.⁸

In April, 1929, an official circular⁹ was sent to all Federal Secondary Schools, ordering the principals to visit all classes, either in person or through specially experienced teachers, for

⁷ Memoria que indica el estado que guarda el Ramo de Ed. Púb., el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., pp. 196-7.

⁸ Bol. de la Sec. de Ed. Púb., Vol. VI, No. 11, Mex., D. F., 1927, p. 53.

⁹ Mem. que indica el estado que guarda el Ramo de Ed. Pub. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., p. 253.

the purpose of insuring more efficient control over the work and methods of the staff and of thus improving the teaching process. These visits are to have, as their immediate objective, teacher-help, the co-ordination of action, and the fundamental unification of criteria in connection with the aims of the programs and of the school in general. The activities of the principal in this regard are checked through monthly reports to the Director of Secondary Education.

The Secondary School Curriculum is as follows:¹⁰

Subject	Hours a week, by years		
	1st	2nd	3rd
Mathematics	3	3	3
Physics	..	4	..
Chemistry	..	..	4
Biological Sciences	3	3	3
Geography	3	3	..
General History	..	..	3
National History	..	..	3
Political Economy	..	..	1
Spanish	3	3	..
Literature	..	..	2
Foreign Language (English)	3	3	..
Drawing and Modelling	3	3	1
Singing	1	1	1
A Trade	3	..	..
Physical Training	2	2	2
Total	24	26	24

Starting in 1929 a course in Civics was added to each year's work.

An outstanding addition to the program of Mexican Schools of this level is seen under the head of "a trade." It is a distinct contribution of the Revolution and aims to provide every student with a means of earning a livelihood, regardless of the social or economic status of his family. Ample opportunity is offered in this connection for the acquisition of skills in a number of the practical arts. The course is plainly pre-vocational and universally compulsory for first year pupils. The eminently vocational tendency of all contemporary Mexican education is a far cry from the verbal, scholastic, and bookish character it possessed before the reform. It constitutes a conscious desire on the part of educational leaders to give reality to school activities and to increase the productive

¹⁰ Moisés Sáenz, *Reseña de la Educación Pública en México en 1927*, Publ. of the Sec. of Pub. Ed., Vol. XVIII, No. 13, Mexico, D. F., 1928, p. 50.

capacity of the people as a whole.¹¹ Considering the scornful aversion with which Latin-Americans have always viewed manual labor, this movement is indeed a bold forward step toward democracy.

Through clubs organized by the pupils or by the teachers, and other extra-curricular activities of varied character, considerable is achieved toward general culture, the proper use of leisure time, social service for the school and community, improvement of health, vocational exploration and guidance, and initiation into civic practices.

The tests and examinations are all of the objective type. The teachers have realized the importance of eliminating the personal or subjective element in grading the pupils, and are working together constantly in an effort to evolve a just criterion for classification and promotion. Short daily questionnaires are answered by the pupils, bearing on the extra-curricular activities engaged in; monthly tests are given on the regular classwork; and at three-month intervals, objective examinations cover all the work of that period. The combined results of these tests constitute the backbone of the pupil's final grade.

Text-books for the secondary schools are selected yearly by a committee of teachers and principals under the direction of the Bureau of Secondary Education. Original texts by Mexican educators, translations of standard foreign texts, and foreign texts in the original are employed. At the discretion of the teachers other works are used for parallel reading and for reference, and newspapers, magazines, and pamphlets of divers sorts are always within easy access.

Since the secondary school is the most recent development of the federal educational program and embodies practically all of the principles underlying it, a brief treatment of several of the secondary offerings will clarify the aims and activities of the revolutionary governments in matters educational.

Before entering into the discussion of the courses of study offered in these schools it is pertinent to observe that all teachers are required by law to have followed special courses dealing with the Psychology of Adolescence, Principles of

¹¹ Ibid., p. 23.

Secondary Education, and Methods of Teaching the subjects they teach. Frequent meetings are held and school problems and activities are discussed at great length. The most authoritative writings on educational matters are read and weighed, with a view to the adoption of the most approved principles of philosophy and psychology. A number of the leading educators in Mexico have done graduate work in the education departments of the foremost American universities and are thus permeated with the contemporary spirit of scientific educational development. And from time to time eminent educators of the United States, such as John Dewey, I. L. Kandel, and others, visit Mexico and lecture on specific topics deemed of vital importance in the proper growth of coming generations. It is the practice of the Secretary of Education, moreover, to issue numerous pamphlets and informational data to all teachers, thus keeping them informed of the latest movements and ideas in their particular field of endeavor for their improvement in service. In 1925 a group of at least a dozen leaders in secondary education were sent to Teachers College, Columbia University, for the intensive study of this phase of education.¹² The members of the group were selected from among the most prominent secondary teachers of Mexico City. All of them had specialized in secondary education in the Faculty of Higher Studies of the National University and for two years had been conducting a critical study of the methods of secondary education in force in the most advanced countries of the world. Their object in coming to Teachers College was to acquire first-hand the theory and practices of this type of school in the United States. More recently, another party was sent to Berkeley, California.

For the purpose of evaluating the courses of study of the Mexican Secondary School, the aims and functions of secondary education in general, as stated by Leonard V. Koos in his *American Secondary School*,¹³ will serve as the criteria. After a minute study of the writings of recent leaders in the

¹² Boletín de la Secría. de Ed. Púb., Vol. V, No. 3, Mexico, D. F., March, 1926, p. 7.

¹³ Ginn & Company, 1927, p. 167.

educational field, Koos evolved the following statement of aims and functions:

Aims

1. Civic-social-moral responsibility.
2. Recreational and æsthetic participation and appreciation.
3. Occupational efficiency.
4. Physical efficiency.

Functions

1. Achieving a democratic secondary education.
2. Recognizing individual differences.
3. Providing for exploration and guidance.
4. Recognizing the adolescent nature of pupils.
5. Imparting knowledge and skills in fundamental processes.
6. Fostering transfer of training.

Any course of studies should, to be considered valuable, make some significant contribution to one or more of these aims and functions.¹⁴ Mexico and Mexican life differ in many respects from the United States and our American life but every possible effort is being made there to provide education for every one along democratic lines and there is every reason to believe that the above aims and functions are applicable to the secondary schools below the Rio Grande and will serve aptly as criteria for this study. An attempt will now be made to judge the value of the offerings of Mexican secondary institutions on this basis.

The subject-matter offered may be grouped under the following heads: (1) Spanish (the vernacular), (2) Foreign Language, (3) Mathematics, (4) Science, (5) Social Sciences, (6) Practical Arts, and (7) Physical Education. Compulsory work is required in all of these groups: 216 hours each of Spanish, a foreign language, mathematics, and physical education; 572 hours of science (216 being devoted to laboratory); 324 hours of social studies; and 108 of drawing.¹⁵ At least one year of work in a trade is required of each pupil. In addition to the required material, optional and elective studies are offered with the provision that not more than six class hours per week of electives may be taken by any student. Not more than 24 hours weekly of required subjects may be pursued during the first year, 19 during the second, and 11 during the third. No pupil may have more

¹⁴ *Op. cit.*, p. 366.

¹⁵ *Boletín de la Secretaría de Educación Pública*, Vol. V, No. 12, Mexico, D. F., 1926, pp. 415-7.

than six class periods per day. Class periods are 50 minutes in length and laboratory periods, 1 hour 40 minutes. Thirty-six weeks of actual classwork constitute the school year.

Spanish.—The study of the national language covers two fields, language and literature. The former is emphasized throughout the first and second years, rather as a continuation of the work carried on in the elementary school. Literature, first introduced through readings by the teacher in the elementary grades, is given the prestige of a separate subject in the third year of the secondary school. The aim of the study of Spanish is, through language, to insure proper and clear expression both oral and written, to instil favorable attitudes and habits towards clear, logical thinking; and to provide a national language to take the place of the poor Spanish and the numerous Indian dialects that abound in the country. Through the medium of literature the aim is to present to the student the general culture afforded through the instrumentality of good reading that presents enlarged and enriched human experiences, high ideals of morality and character and citizenship, and an accumulation of knowledge otherwise unattainable.

Taken as a whole the study of Spanish may be said to serve every one of the aims and functions suggested by Koos for secondary education. Besides apportioning an increased command of the fundamentals and mechanics of the language both spoken and written, and thus insuring clear expression and ready understanding of what to many Mexicans is practically a foreign tongue, it makes for social integration and a spirit of nationality.

Owing to the fact that Spanish is a remarkably logical and phonetic language, spelling is of negligible import and the fundamentals of composition are acquired comparatively early. This permits concentration on the content rather than on the structure, thus enabling the teacher to capture the interest of the pupils and to guide them along the desired channels. Among the oral and written exercises done by the pupils are many topics which have a vital influence not only on their immediate school activities but also on their later lives. Be-

sides the well-known compositions, summaries, reports, criticisms, discussion, letters, debates, and speeches based on oral and silent readings of prescribed or free topics or on materials studied in other fields, a great deal of work is done in interpreting graphs, pictures, cartoons, tables; in constructing programs for work, excursions, or entertainments; and in drawing up public documents.¹⁶

In oral and written composition, as well as in reading, the study of the national language is linked with all other subjects pursued by the pupil and ample opportunity is thus afforded in exploratory activities conducive to awakening interests and tastes in innumerable directions. Clubs and student organizations of various kinds are formed by the pupils with or without the intervention of the teaching body, and in these all sorts of discussions take place and much attention is given to the cultivation of good manners and proper speech.

In all phases of the two divisions in which the language is presented, cognizance is taken of the adolescent nature of the pupils and of the individual differences evidenced by the varying amounts and kinds of work performed. Pupils are grouped according to their I. Q.'s and retested repeatedly during the school year, changes being effected in the several sections, when necessary, to preserve the homogeneity of the group.

Mathematics.—Although great strides are being made toward modernizing mathematical instruction in the secondary schools of Mexico, there is still a notable amount of unwarranted material included in the course of studies. In the first year, before proceeding to the introduction of new matter, the major points of the arithmetic taught in elementary grades are again taken up—not in the manner of a review but through actual application of the fundamental principles to everyday problems and situations. The November, 1927, number of the Bulletin of the Secretariat of Public Education in Mexico contains the following statement in this respect: "The mathematics which we aim to introduce in

¹⁶ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 4, Mexico, D. F., 1928, pp. 46-62.

the secondary school is that which modern civilization is increasingly demanding every one to employ, utilizing it as an instrument of labor to better meet the exigencies of life."¹⁷ The Mexican Department of Education has adopted the "activity system" of instruction in all its schools and in all its courses: even in mathematics learning comes through doing. And this does not mean merely working problems on paper. Mathematical knowledge and facility are to be acquired through personal observation and experience, and in so far as it is possible the pupils formulate their own problems from actual life situations and solve them as best they can. The teachers are guides and helpers who suggest the character of the problems, the manner of solution, and ways of checking the accuracy of the various steps involved.

After the fundamentals are sufficiently mastered, fractions, decimals, proportion, percentage, area, volume, and intuitive geometry are taken up, the same methodology being employed throughout. The last third of the school year is devoted to ordinary financial operations ranging from simple interest to stocks and bonds, newspaper quotations of the market, and further activity dealing with the most usual geometrical figures and their application.

The second year is given over to algebra and practical geometry. Here are found the same conditions that exist in our own secondary school: a vast superfluity of mental gymnastics of decidedly questionable value for life outside of school. However, notwithstanding the fact that two years of mathematics are required of every pupil, individual differences are recognized and those pupils who evince no great aptitude for the subject receive only such instruction as their capacities warrant. A review similar to that given at the beginning of the first year precedes the work of the second.

There seems to be a strong tendency to maintain a close relationship between arithmetic and the algebra and geometry, and considerable emphasis is placed on establishing and strengthening associations in the minds of the pupils to the end that they may acquire the ability to understand and solve

¹⁷ Vol. VI, No. 11, p. 199.

the numerous life problems in which mathematical skills are involved. On completing the two years of required activities in this field, every pupil should possess a thorough grounding in the subject, should be familiar with the geometrical forms common to Nature, and be able to apply his knowledge of their measurements and relationships to material situations.

The third year comprises more advanced algebra, plane geometry, and trigonometry.¹⁸ This course is designed chiefly for those who intend going on into the specialized classes of the Preparatory School, which has come to be somewhat similar to our American colleges. Others wishing to do so may elect to pursue it provided they have successfully completed the work of the two preceding years. Every effort is extended by the instructors to inculcate a desire for accuracy, rapidity, and neatness along with the ability to see a problem when it exists and to attack it in the most expedient manner. Through the application of the theory of individual differences in these courses in mathematics, the way to the popularization of the secondary school is being opened. Other factors are operating in the present growth of these new schools, but it can be safely affirmed that the old conventional brand of mathematics as taught, say ten years ago, with the uninteresting presentation accorded to it, would have retarded development to a considerable extent.

By giving mastery in the fundamental processes these courses will produce a keener and more intelligent type of citizenry, and thus we may assume that the civic-social-moral aim of secondary education is being served notably. Mathematics, as offered in the third year course especially, will make for vocational efficiency along engineering and similar lines, and the operation of the "learning by doing" principle that underlies Mexico's present educative movement, greatly broadens the range of activities and hence of vocations with which arithmetic at least is intimately related. Transfer of training surely occurs, particularly in regard to mental habits of accuracy and neatness, which no doubt exercise considera-

¹⁸ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 4, Mexico, D. F., pp. 255-70.

ble influence in the organization and retention of subject matter in other fields.

Foreign Languages.—At the present time English is the foreign language taught in the secondary schools of Mexico, French being postponed until subsequent years. The principal aims, as stated in the April, 1928, number of the Bulletin of the Secretariat of Public Education,¹⁹ are: (1) to provide an avenue of understanding between English-speaking peoples and the people of Mexico; (2) to develop the personality and character (moral) of the students; and (3) to open new fields for vocational selection and for scientific and literary post-school reading.

The required course covers two years and furnishes ample exercises in grammar, vocabulary-building, sentence structure, dictation, translation, silent and oral reading, and pronunciation. The textbooks now in use were written especially for Mexican Secondary Schools by the former Under-Secretary of Public Education in collaboration with an American teacher. The content is nicely graded according to the degree of difficulty and otherwise conforms to sound pedagogical principles. In addition to the regular texts, numerous magazines, periodicals, newspapers, short stories, plays, and novels are utilized in and out of class. The English language is employed as largely as possible in the classwork but the pupils are permitted to make their explanations and observations in their own tongue. Reading is looked upon as a medium of observation; writing or composition as a medium of individual activity; and conversation as a much desired combination of the two. English clubs are organized for the purpose of kindling added interest in the study and use of the language through the discussion of customs, manners, ideals, standards, business methods, books, inventions, great men and women, and like topics.

To further interest and consequent progress in the study of the language, rules and tables of verbs and vocabularies are relegated to remarkably secondary importance. As far as possible everything is taught in complete phrases and sen-

¹⁹ Vol. VII, No. 4, p. 272.

tences, but little emphasis being attached to absolute accuracy. Pupils are encouraged to use the language freely and to apply it, both in writing and speaking, to everyday situations. Encouragement is also given to the practice of studying from examples of the handwriting of the pupil himself and of reproducing the sentence or phrase in writing and speech at the same time as an aid to retention.

Thus, although indirectly in some instances, the English courses serve all the aims set up for secondary education. Through the content English serves the civic-social-moral, the vocational, the health, and the recreational. One of the immediate aims is to inculcate a desire on the part of the pupils to continue the study of English for future use in recreational, business, and scientific pursuits and, in the large cities of the interior—notably in the capital—this aim is being achieved in a most satisfying manner. As in the case of mathematics, the recognition of differences in individual capacities and interests, resulting in varying demands as regards pupil achievement in language, operates in favor of the democratization of secondary education or, at least of diminishing the tendency to regard a required foreign language as a hindrance to popularization.

General Science.—Following the principles guiding the whole of the contemporary educational program in Mexico, the science courses are conducted along “activity” lines. Physics, chemistry, and the biological sciences are all presented in the most approved modern ways. The conventional old-style mode of presentation, in which the teacher propounded a congeries of vague and abstract laws and principles and demonstrated their application in certain traditionally prescribed experiments, the pupils memorizing as much as possible—being permitted, perhaps, to repeat a few of the less complicated experiments—has gone by the board; contemporary educational leaders in Mexico have adopted the “activity plan,” and learning is to be acquired by doing. Here again we find the teacher in the rôle of guide and aid in the learning process. Re-psychologized and socialized education through individual pupil expression as advanced by

John Dewey has supplanted the traditional methods. Not only is the school room turned into a miniature community: the entire community is turned into a school room.

With due regard for the content differences all science courses in Mexican secondary schools are presented in the most advanced style, Dr. John Dewey being the "standard" of present-day Mexican educational philosophy. Major stress is placed on the relationships of the respective science with the everyday life of the community. Visits are made to factories, shops, industrial laboratories, to permit the pupils to observe and have explained the various activities going on about them. Individual observation of phenomena and endeavors on the part of the pupils to interpret them are greatly encouraged. Homemade apparatus is employed to a great extent, particularly in physics. Rules and abstract principles are to be confined to those practical phenomena accessible to the pupil day by day: the science is to be made to live everywhere or, as stated in the course of studies for physics,²⁰ "in the sky above, in the surrounding atmosphere, in the shining light, in foodstuffs, in the objects he (the pupil) handles, the vehicles he rides in, the equipment of the classroom, the furniture, sanitary installations, etc." A number of the schools promote camping trips and other excursions which are intimately related to the instruction of science, history, geography, art, and civics—in fact, to all school subjects.

When possible the laws of science are to be formulated by induction by the pupils themselves. Frequently the teacher is to take stock of the pupil's knowledge and understanding by requesting scientific observations concerning objects in the classroom or about the school. Encouragement is also given to experimentation in which a number of pupils take part. Social meetings are held from time to time for the double purpose of discussing practical problems relating to the respective science and of promoting the cultivation of social habits and good manners among the pupils. Equipment not furnished by the school authorities is purchased wholesale by the class, thus acquainting the pupils with the advantages

²⁰ Boletín de la Secretaría de Ed. Púb., Vol. VI, No. 2, Mexico, D. F., 1927, pp. 239-256.

and benefits to be derived from cooperative societies—a general movement in favor of such cooperative buying and selling being one of the outstanding elements of contemporary Mexican educative policy.

The field work of the class is centered chiefly on such projects as the city water works, pipe lines, ice plants, the sewage system; and their service and efficiency are discussed and studied in great detail. Biographies of the most eminent men of science, stories and anecdotes relating to discoveries and inventions, and accounts of expeditions and experiments are utilized widely in the classwork to the end of awakening pleasure and interest in the subject and at the same time of giving the pupils a clear idea of the obstacles and errors connected with the development of modern civilization, and of leading them to see what apparently simple things were once considered of maximum difficulty or even of unfathomable mystery. It is hoped in this way to cultivate an attitude of confidence in the face of difficulty.

These science courses in so far as the content material is concerned are practically the same as those offered in the secondary school of the United States. The great difference lies in the method of instruction. Between theory and practice there undoubtedly is considerable variance but it may be safely affirmed that the revolutionary movement so active in the Mexican Rural Schools has also produced these secondary institutions and is exerting noteworthy energy toward the socialization of the instruction in them. All teachers are required to use *Principles of Secondary Education*, as set forth by Uhl, by Monroe, and by Inglis, as guide and reference in their teaching problems; and Woodhull's "The Teaching of Science" must be on every teacher's desk. Conducted in conformity with the methodology proposed by such authoritative writers in the field of secondary education, these science courses leave little doubt that their presence in the program will be amply justified in terms of service rendered towards achieving the objectives advanced by Koos.

The Social Sciences.—Geography is taught in the first two years and considerable stress is laid on the national aspect of the subject. The immediate community, the State, and the

Nation are taken up in the order stated; the topography, climate, products, and people are studied in great detail. Emphasis is given to the agricultural and industrial possibilities of the country, particularly of the region in which the school is situated. After the republic of Mexico has been quite thoroughly covered, the study of the remaining divisions of the Western Hemisphere is commenced. During the second year Europe, Asia, Africa, and Australia are taken up. Geography is closely correlated with history, political economy and civics, and in this way a foundation is laid for whichever of the three third-year subjects the pupil may decide to pursue.

The course in general history²¹ comprises 108 classes distributed as follows: 1 to the Concept and Importance of History; 1 to History Sources and Auxiliary Sciences; 1 to Pre-historic Times; 11 to the Peoples of the Ancient East; 14 to Greece; 22 to Rome; 17 to the Middle Ages; 17 to Modern Times; and 24 to Contemporary History. The major aims are to give the pupil, through a study of the political, social, economic, ethical and religious aspects of the world history, an understanding of the evolution of modern civilization in all its phases and to prepare him, through the study of happenings in the past, to participate intelligently in the functions of the town and the state, and to judge calmly and sanely events, ideas, and persons.

Maps, photographs, pictures, and slides are employed to illustrate customs, conditions, types of architecture, dress, race, products, as well as the outstanding and most influential characters and events of the past and present. The contributions of the several epochs to modern civilization are presented and explained in terms related to the present experiences of the pupils, who are encouraged to keep individual albums or scrapbooks of pictures, maps, descriptions, and observations encountered in magazines, newspapers, and books dealing with the unit being discussed. Monographs are likewise prepared by the pupils on each main topic and its bearing on modern progress as a whole.

²¹ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 8, Mexico, D. F., 1928, pp. 180-195.

For purposes of reviewing the subject matter, of motivating the individual investigations, of exercising the judgment of the pupils, and of developing powers of oral and written expression, such problems as the following are frequently proposed by the teachers: (1) In what manner are geography and history related? (2) What manifestations of the life of a people reveal most precisely its cultural state? Analyze these manifestations and explain how they reveal cultural conditions. (3) Characterize life during the Middle Ages and compare it with contemporary life. (4) What is Pan-Americanism? Should there be a Latin-American Union?

In addition to the readings required for understanding the notions of the interdependence of nations, the important problems of the past and present, numerous visits are made, where practicable, to museums and exhibitions and the interests and tastes of the pupils are given the opportunity to make themselves known and felt.

The principal aims of the course in political economy²² are (1) to give a general idea and understanding of economic conditions as an important aspect of social life, (2) to awaken interest in Mexican economic problems and their solution, and (3) to inculcate habits and attitudes of observation and investigation of social phenomena and the laws governing them. Economic questions related to present-day Mexico are given as thorough treatment and study as time permits, most especially those bearing on the Agrarian and the Labor situations, agriculture and industry, supply and demand, transportation and communication, capital and exploitation by foreign concerns.

Like the other social subjects this course offers a wide field for individual reports and investigations, and the papers prepared by the pupils are summarized and discussed in class. During the year, visits are made to shops and factories to enable the pupils to obtain first-hand information concerning organization, equipment, division of labor, working conditions, and production. Visits are also made to banking houses and cooperative institutions.

²² Boletín de la Secretaría de Ed. Púb., Vol. VI, No. 11, Mexico, D. F., 1927, pp. 273-278.

National history²³ calls for 108 periods which are distributed as follows: 2 to the Region and the Race; 28 to Pre-Cortesian Times; 10 to the Discovery of America and the Conquest of Mexico; 10 to Mexico Under the Viceroy; 10 to Independence; 20 to Modern Mexico; 5 to Contemporary Times; 19 to visits and excursions; and 4 to tests. The aims are: to suggest and cultivate patriotic ideals and sentiments, guiding and developing them towards the unification of all Mexicans; to habituate the pupils to discernment and to the formation of sound judgments concerning the men, ideas, and events which have had most influence in the social and political life of the country; to create an attitude of fondness toward the study of Mexican problems; to develop the feeling of solidarity among all men and of cordiality among nations; and to develop and fortify moral character. The following quotation from Don Lucas Alamán, an eminent Mexican writer and historian, is cited²⁴ in connection with these aims: "No study can be more important than that which leads us to our origin, the elements that form our society, the sources of our uses and customs, our laws, our religion, our civil and political state, the way in which we have come to be what we are, and the obstacles that have had to be overcome in the process."

In general this subject is presented in much the same way as the other social sciences. Numerous excursions are made to towns, buildings, monuments, and places of national historic interest and importance, and reports of these trips are written by the pupils. Other papers are prepared on such topics as: The influence of the indigenous culture on Spanish culture; A critical judgment of the conquest; Education among the Nahuatl Indians. Adequate bibliographies are provided by the teacher, suggested by the course of studies. Each pupil is required, moreover, to write a legend and a tradition of the region from which he comes.

This course in national history is very comprehensive but it would seem that less time should be devoted to Pre-Cortesian

²³ Boletín de la Secretaría de Educación Pública, Vol. VI, No. 11, Mexico, D. F., 1927, pp. 278-286.

²⁴ Ibid., p. 279.

and more to Modern Times. Almost a third of the entire class time allotted to the course—28 periods plus several excursions—is dedicated to the study of the various tribes of Indians that occupied the territory now comprising Mexico. The Modern Era, however, extends from the first quarter of the nineteenth century to the end of the Porfirio Díaz régime in 1911, so that 20 periods in this case are really none too many. Since all the other sub-divisions are brought into relation with present events and conditions, the five periods devoted to the Contemporary epoch serve adequately to summarize and emphasize the material contained therein.

The course in civics²⁵ has as its aim the formation of the good citizen, it being understood that by a good citizen is meant "one who ably contributes in an active and intelligent manner to the well-being of the community in which he lives." The principal objectives, therefore, are: (1) social interest or civic intelligence, through knowledge and direct contact with all those elements, factors, or agents of community life which in any way contribute to collective well-being; (2) social responsibility or civic pride; and (3) participation in civic and social activities. Civics is given in each of three years and the community is studied with regard for the following points: (1) Society, (2) Health, (3) Protection of Life and Property, (4) Recreation and Amusements, (5) Education, (6) Civic Beauty, (7) Wealth, (8) Patriotism, (9) Modes of Communication, (10) Modes of Transportation, (11) Charity Organizations, (12) Correction—jails, reformatories, (13) Political Organization and Administration. The third year adds Migration, Taxes and Revenue, Individual Rights, Democracy and Public Opinion, and Vocational Problems.

In keeping with the aims of the actual government in Mexico, first definitely formulated by the Department of Public Education during the presidency of General Plutarco Elías Calles, the courses in civics are designed to spread the spirit of nationality, of patriotism, throughout the country and at the same time to raise the level of civic intelligence and foster

²⁵ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 3, Mexico, D. F., 1928, pp. 321-323.

the participation of as many people as possible in the activities of the community. The successful working of democracy depends to a very great extent on popular intelligence, and preparation for proper participation in a democratic government whether Federal, State, or Municipal, requires actual experience in self-government. To this end the pupils are encouraged to enter actively and intelligently into the workings of the community, either individually or collectively ; to discuss freely all questions concerning the welfare of society, exhibiting due regard for the opinions of others ; to put into practice the principle that the rights of the individual end where the rights of others would be interfered with ; to respect the will of the majority both in and out of school ; to accept any charges entrusted to him, even though they be of no personal interest to him, so long as they are for the good of the group.

In the third year every pupil must become a member of three clubs or school societies and must perform at least ten acts of social service to the satisfaction of a committee chosen by the pupils themselves, advised by a teacher. A school bank is maintained, each pupil depositing from 12 to 25 cents monthly, to defray expenses arising in connection with civic activities undertaken by the class. Once a month, also, all classes assemble to discuss problems of collective interest or to make preparations for school or civic festivals and the like.

Certain articles of the National Constitution—particularly those dealing with citizenship, rights, privileges and obligations, property, labor, sanitation—are studied and discussed. Repeated visits are made to all kinds of public works and offices, interviews are had with federal, state, and local officials, and individual reports are prepared in each instance. In shops, factories, business houses, financial institutions, schools for the deaf and dumb and blind, government buildings and offices, reformatories, hospitals, orphanages, fire departments, police stations, exhibitions ; all kinds of experiences are sought by which to broaden the range of the pupils' world and to arouse interest in the welfare of the community and the republic. The problem of vocational guidance is directly related to these excursions. Lists are prepared of the advantages and disadvantages of each profession or occupation

brought to notice through these visits, and in each instance an analysis of the activities of the "job" is made and discussed.

These courses in the social sciences—geography, general and national history, political economy, and civics—serve to a greater extent than any other subject matter offering, the aims and functions of secondary education as stated by Koos. The intimate relationships established between the school and the community, the constant training for and participation in social and civic activities, the innumerable investigations and reports on public works and business and industrial occupations, all tend to the achievement of the civic-social-moral aim, the health aim, and the occupational efficiency aim. For a great number of pupils the recreational and æsthetic objective will undoubtedly be taken care of. The wide diversity of activities in all the courses provides ample opportunity for the recognition of individual differences, as well as of the adolescent nature of the children. The range of freedom in the selection of topics for written and oral work and the number of papers or reports prepared aid in the approach to mastery in the fundamental processes. The "job analysis" performed in connection with the many occupations and professions encountered through the course aids in exploration and guidance service. Transfer of training is doubtless fostered to a considerable degree, conditions being set up throughout the course to that end. And finally, the very nature of the activities and subject matter involved tend to make these courses highly popular and thus may be said to be achieving a more democratic secondary education.

Drawing: Freehand.—The course in freehand drawing²⁸ comprises 108 periods distributed as follows: 12, Lettering; 10, Preliminary exercises in pencil and charcoal, light and shadow, floral motifs in outline; 14, Color Study, plants and flowers; 18, Drawing of Common Objects, proportion, perspective; 12, Still Life; 6, Animals; 10, Exercises in Composition, Analysis of Style; 26, Composition Involving Rhythm, symmetry, harmony of color, etc. The aims are:

²⁸ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 4, Mexico, D. F., 1928, pp. 193-196.

to give the pupils a universal graphic medium of expression, to develop faculties of observation, analysis, originality, and the manual dexterity resulting from practice in drawing, to awaken and cultivate a taste for the æsthetic, to inculcate habits of perseverance, precision and clearness, and to facilitate the understanding of pictures, graphs and sketches used in other courses.

*Drawing: Mechanical.*²⁷—The 108 periods in this subject are distributed as follows: 5, Preliminary Observations and Explanations; 21, Lettering; 18, Use of Instruments; 12, Rough Drafts of simple objects, to measure; 38, Drawing by Instruments of same or similar objects; 6, Elevation and exact drawing of a plan of a part of the school building; 8, Sketch and finished drawing of a simple object. This course aims to provide an understanding of rough sketches and finished drawings, to serve as an exploratory course for vocational guidance, and to inculcate habits of accuracy, neatness, and discernment.

*Modeling: Elementary.*²⁸—Thirty-six periods of one and one-half hours each are given in this subject. The first few lessons are devoted to explanations of the purposes and uses of modeling and the relation it bears to freehand and mechanical drawing. Plastic substances and their treatment, and the use of instruments are then explained and illustrated by the teacher. After the above explanations have been advanced the pupils are permitted to work with the materials and instruments in the construction of solid geometrical forms and plaques. Instruction progresses from these simple objects through common vegetables, single and in groups; leaves, flowers, fruits, and small animals; to the modeling of bowls, vases, plates, busts. In practically all cases the pupil is required to draw a rough plan of the intended work, which is presented to the teacher before the modeling begins. The flora and fauna characteristic of Mexico as well as the models and designs of Indian pottery, temples, monuments, and trinkets are employed as motifs.

²⁷ Ibid., pp. 196-201.

²⁸ Ibid., pp. 201-202.

*Physical Education.*²⁹—The following aims are advanced for the work in physical education in the secondary schools of Mexico: the preservation of the health of the pupils and the correction, so far as possible, of their physical defects; the physical development of the pupils along normal lines; the development of neuro-muscular coordination; and the development of good sportsmanship. Two one-hour classes per week are prescribed.

For the organization of the sections in Physical Education, a medical examination is given to all pupils who are then divided into three groups according to their school age and their physiological development. The medical examination comprises the following: (a) pathological condition and antecedents; (b) anthropometric measurements—height, weight, and chest girth; (c) the organs—heart, lungs, genitals, ears, eyes, nose, throat, and dynamo-metric force; (d) habits—food, tobacco, alcohol, sleep, exercise, bath; (e) and the prescription for correcting in so far as is possible the defects found.

Observations are made and instructions are given during the examination, with relation to hygienic principles of nourishment, sleep and rest, cleanliness and baths, care of the teeth; and the teachers repeat these admonitions to their classes. Special activities are prescribed for each group and for all classes together. In addition to the regular drill with dumb-bells, Indian clubs, and wands, all kinds of organized games and sports are participated in by all the pupils. Boxing, wrestling, jiu-jitsu, fencing (with drill wands), and swimming are accorded considerable emphasis, especially in the upper classes. Regularly scheduled inter-class and inter-school sports and games are held throughout the year.

To summarize the course offerings of Mexican secondary schools, it may be said that there is an increasing tendency to make them conform more and more to the most advanced principles of democratic education. The schools themselves are modeled deliberately after the American Junior High

²⁹ Boletín de la Secretaría de Ed. Púb., Vol. VII, No. 8, Mexico, D. F., 1928, pp. 154-157.

School and particular emphasis is placed on the peculiar features of that institution. The reasons for establishing the Secondary School as a separate element in the federal educational system are stated by the Secretary of Education, Dr. J. M. Puig Casauranc, in the following terms:³⁰

The pedagogical reasons for the separation of the secondary cycle—which already existed and is not to be altered—from the preparatory division proper, were, first the consideration that neither the Department of Primary and Normal Instruction (in which a secondary division has functioned since last year) nor the National University, should have direct control of the secondary schools, because experience has shown that under the former the secondary school becomes too elementary, and under the latter it acquires aims of a unilateral nature; secondly because the secondary schools, or rather, the studies corresponding to the secondary division already existing in the organization of the National Preparatory School, should constitute a bridge between the superior elementary schools and the university schools, in this latter group being included those courses really preparatory for professional careers; thirdly because the problems of children of 13 to 18 years of age, at which age the studies corresponding to the secondary cycle are generally made, are of a peculiar character arising from and depending on the period of adolescence which demands especial understanding and treatment; and lastly because it is just and desirable that a greater percentage of young people who complete their elementary schooling be given the opportunity to amplify their knowledge by pursuing secondary studies, an opportunity which was not sufficiently provided by the National Preparatory School because of its capacity and location. . . .

This appeal for the recognition of the adolescent nature of the child, for the provision for individual differences, and for the democratization of secondary instruction, clearly demonstrates the trend of contemporary Mexican educational thought. Coming as it does from the former National Secretary of Public Education it shows the acceptance of modern principles in the educational field by those men who are authorized to apply them. And the adoption of these advanced ideas and practices in the new secondary schools is evidenced by the courses of study discussed above.

While it is true that the secondary school population is relatively small it must be borne in mind that owing to the lack of funds the Federal Government in 1929 adopted the practice, temporarily, of admitting to several of the schools in Mexico City only those applicants whose average grades

³⁰ Boletín de la Secretaría de Ed. Púb., Vol. V, No. 3, Mexico, D. F., 1926, p. 6-7.

in the superior elementary school are 90% or above.³¹ Cognizance must also be taken of the fact that the contemporary educational program in Mexico is primarily concerned with the improvement of the lot of the masses and as the vast majority inhabit the rural sections of the country, the Rural Schools are receiving the greatest attention both as to support and expansion. The same spirit that moves the workers in the rural fields, however, is in evidence in elementary and secondary institutions. Identical philosophical principles are applied in all federal education. The start is being made at the bottom; and when the standard of living has been sufficiently raised for the great masses, when the people as a whole have been educated to their new-found freedom from serfdom, vertical expansion is contemplated on a much grander scale than at present. The logical step-up will come in the secondary school, and already the foundation is being laid.

All courses offered in these schools are intimately related to the everyday life of the community, varying considerably from community to community and from year to year within the same community. To a notable extent the subject matter has been analyzed into activities, in terms of the experiences of the pupils, and ample encouragement is afforded towards self-realization through conscious effort. Activities outside of the school are given the same or more importance than the regular class room work. Excursions, hikes, and camping trips are utilized both for curricular purposes and for physical training. For the achievement of proper democratic development in keeping with the aims and purposes of modern education, the needs, capacities, and interests of the pupils are considered at every turn and the subject matter is made to conform to them.

In the case of each subject offered for study a very acceptable majority of the aims and functions of secondary educa-

³¹ Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., p. 197.

tion as formulated by Koos can be seen to operate. As would be expected in a country such as Mexico, where until recently over three-fourths of the population were wretchedly illiterate and totally devoid of all ambition, greatest emphasis is being placed on citizenship, so that the civic-social-moral responsibility aim receives the greatest attention. Next in order of importance to Mexicans is the vocational objective, followed closely by physical efficiency. Judging from the general trend of the educational literature emanating from Mexican writers since the inauguration of the current program, tireless efforts are being made to inculcate lofty ideals, attitudes, and habits in the pupils, and thus to prepare them for recreational and æsthetic participation and appreciation. Every course is designed to lead in this direction.

Intelligence tests are given each year to each class and the results of these tests, coupled with the achievement records, serve as a basis for homogeneous grouping. In this way the adolescent nature of the pupil is being recognized and provision is being made for taking care of individual differences. These two features of modern educational policy are being put into operation within the several courses, also, for divers degrees of attainment are accepted according to the physical and psychological nature of the child.

Transfer of training is specifically aimed at, the teaching staff availing themselves of every opportunity to show the relationship between subject matter and principles, and the practical situations of life. Training in the fundamental processes is continued in the three years of secondary schooling and is imparted not only in immediate connection with the regular courses but also through the medium of clubs and organizations and other extra-curricular activities. The "Campaign for a National Language" (Campaña Pro-Lengua Nacional) offers an excellent example of this latter. Democratization of the secondary school is still a thing of the future, but little doubt can be entertained that, should the present policy be adhered to, favorable results may be expected in this regard likewise.

DEPARTMENT OF TECHNICAL, INDUSTRIAL, COMMERCIAL
INSTRUCTION

The Department of Technical, Industrial, and Commercial Instruction was organized in 1925 to develop and protect national industries by preparing competent workmen for the different fields and to afford to women opportunities to receive education in manual activities for the betterment of their condition, either in the business world or in the home. In 1929, 27 centers of this type of federal instruction were operating in the Republic, 15 in the Federal District, and 12 in the States.

The object in bringing these schools together under one department was to make more practicable a definite and modern orientation for all. Many of the institutions functioned before the reorganization took place, but they functioned independently and their offerings were rather one-sided; all technical, all industrial, or all commercial. Since the re-organization, however, the aim has been to complement technical or industrial knowledge and practice with the commercial understanding and efficiency necessary for successful application. Not only technical or industrial mastery is the objective but also the most modern methods of using it—information concerning the markets, desirable factory sites, sources of raw materials, transportation, costs, foreign merchandise, customs and duties. Along with the specialized subjects of the school, related academic courses are offered.

A program of action was adopted for 1929, calling for the socialization of the schools to secure bonds of solidarity and cooperation among all persons interested in their progress and for the specialization and industrialization of the practical subjects offered, in order to better fit the students for active and efficient participation in real industrial life. The socialization feature has been sought through the organization and fostering of Parents' Clubs and Teacher-Student Cooperative Societies in all the schools of this character. At the close of the 1929 session 132 of these cooperative societies existed, with 6146 members and capital amounting to nearly 11,000

pesos (\$5500 U. S. Currency). For specialization purposes each school was directed to select from the different industrial courses offered by it, those which it was best prepared to give and which were most closely related to the locality. The selection being made, an effort was put forth to provide the elements necessary for their best development—special teachers, machines, tools, materials—and those courses now constitute the entire offering of that school. Measures have also been taken to have all these schools follow as closely as possible the industrial, economic, and commercial procedures of the factories and shops of the country.

The teaching staff is selected with as much care as present circumstances permit. Twelve hundred fifty-nine teachers were employed during the year 1928-1929, chosen with reference to their preparation and experience, but among this number are many instructors of minor crafts and domestic economy who, although experts in their particular line, are almost wholly lacking in professional and academic training. The Federal Department is now making a study of their qualifications in order to form a teachers' scale for the improvement of the service.³²

The total enrollment in 1926 was 22,570 students in the day and night classes together. The average attendance was 13,913. In 1929 there was a total enrollment of 20,614 and an average attendance of 13,747. The decrease in enrollment is accounted for in part by the fact that a number of the popular commercial courses have been transferred to the University. A movement to raise the entrance requirements, which have been very lax, has also been instrumental in preventing the enrollment of many pupils who drop out after a short, futile attempt to do the work demanded.

State and private schools of technical or industrial character may be recognized by the Federal Government, provided that their courses of study, programs, schedules, laboratory equipment, class and shop work be equivalent or

³² Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., pp. 133-191.

superior to those of the government schools and their personnel be approved by the Secretary of Public Education. Schools thus incorporated are to submit to government supervision and comply with all regulations concerning the government schools.³³ Uniform specialized courses of study have been adopted, leading to degrees, certificates or diplomas in the following fields: child care, dressmaking, culinary art, housekeeping, millinery, embroidery (machine and hand), stenography, typewriting, bookkeeping, umbrella making, fruit preserving and conserving, batik work, mechanics, blacksmithing, pattern making, metal working, plumbing, automobile mechanics, automobile painting, chauffeur, painting and paper hanging, electricity, telephony and telegraphy, radio, carpentry, cabinet making, well drilling, consular service, decorating, masonry, drafting, plating (nickel, silver, gold, etc.), foundry, and others.

As in all schools maintained by the Federal Government, physical training is required in all courses.

The finished products from these schools are sold through the cooperative stores connected with the plants, over \$20,000 being earned in this way in 1927, after the deduction of the costs of materials and the percentage allowed the students who made the articles.

³³ Boletín de la Secretaría de Educación Pública, Vol. V, No. 3, Mar. 1926, Mex., D. F., pp. 168-169.

CHAPTER VI

THE NATIONAL UNIVERSITY OF MEXICO

The National University of Mexico in Mexico City crowns the Federal educational system. Founded in 1910¹ through the union of the several individual faculties that already existed, and with the Universities of Paris, Salamanca, and California as sponsors, this factor in Mexico's educational movement is governed by a president and a University council composed of professors and students of the different faculties and representatives of the Federal Department of Public Education. A special law permits it to administer its own funds, but these are so limited that the National Government has to provide for its maintenance almost entirely.

Until 1926 the National University maintained a five-year preparatory school. In that year, however, the National Preparatory School was re-organized, the secondary cycle becoming a part of the secondary system of the District schools. The professional cycle, formerly consisting of two years' preparation for advanced study in the University faculties, has been extended to three years and the University confers three baccalaureate degrees on its graduates: Letters and Social Sciences, Biological Sciences, and Physics-Mathematical Sciences.

The first of these degrees is considered as preparatory for the faculties of Law and of Economics; the second, for the faculty of Dental Surgery; and the third, for Architecture, Civil Engineering, Mining Engineering, or Oil Engineering. All three baccalaureate degrees are considered preparatory for the faculty of Philosophy and Letters. Two-year preparatory curricula are also offered for students who desire to pursue university work in Chemistry, Forestry, Electrical Engineering, Metallurgy, Dentistry, Pharmaceutical Chem-

¹ La Educación Pública en México a través de los mensajes presidenciales, Publ. de la Secría. de Ed. Púb., Mexico, D. F., 1926, p. XIV and p. 162.

istry, and Surveying. The preparation for the faculty of Pharmacy consists of one year's work. Certificates are granted by the University for the completion of the one- and two-year curricula.

Entrance requirements to the Preparatory school are the successful completion of the secondary school studies and good health, as determined by the physician of the school.² The enrollment in this school in 1929 was 1098 students in the day classes and 434 in the evening classes.

In 1929 the University proper contained the following schools and faculties: the faculty of Medicine; the faculty of Dentistry; the faculty of Engineering; the faculty of Chemistry and Pharmacy and the Practical School of Chemical Industries; the faculty of Law and Social Sciences; the faculty of Philosophy and Letters; Graduate Faculty and Higher Normal School; the National Preparatory School; the National School of Fine Arts; the Free School of Sculpture and Wood Carving; the National Conservatory of Music; the High School of Public Administration; the School of Physical Education; and the Summer School for foreigners. The Organic Law of the National University in effect since July, 1929, added a number of other faculties, institutions, and schools, most of which have not yet been incorporated into the University. Among these are the School of Agriculture, the Higher School of Commerce and Administration, the National School of Veterinary Medicine, the National Library, the Biological Institute, the Geological Institute, and the Astronomical Observatory.³ This same law established also the separation of the Higher Normal School from the Faculty of Philosophy and Letters. It likewise removed the National Conservatory of Music and the School of Sculpture and Wood Carving from the direction of the University and placed them under the control of the Department of Public Education.

² Mem. que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mex., D. F., pp. 619, 647-55.

³ Mem. que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mex., D. F., 1929, pp. 601-2.

The new Organic Law of the National University,⁴ signed by Provisional President Emilio Portes Gil on June 5, 1929, states the aims of the institution in the following terms:

Article 1. The National University of Mexico has as its objectives the imparting of higher education and the organizing of scientific investigation, particularly with reference to conditions and problems of a national character, for the formation of professional and technical experts useful to society, and the expression of the national culture in its highest terms, as an aid in the integration of the Mexican people.

It is also an essential aim of the University to carry its teachings, through the department of university extension, to those who are unable to attend the higher schools, in this way placing the University at the service of the people.

Article 2 declares the University autonomous within the provisions of the National Constitution, and article 6 provides that its government shall be shared by the University Council, the President, the Directors of the faculties, schools, and institutions which constitute it, and the Academias of Professors and Students. The law also regulates the composition of the University Council, determines the qualifications, duties, and term of office of the President, states the qualifications and duties of the department heads, the relation between the University and the State, the funds of the institution, and their disposition, and other details concerning matters of administration and organization.

The National University has a Department of University Exchange whose three important functions are the organization of the summer courses for foreigners and Mexicans, cultural exchange between Mexico and other countries, and the holding of seminars for the study of international questions. Since 1924 many eminent European and American professors have been brought to Mexico through this department to lecture and give courses in their particular field. The summer school of the University was attended by 234 foreign students in 1927, most of whom were American teachers of Spanish desirous of perfecting their knowledge of the language. The Department of University Extension organizes brief courses and offers numerous lectures of a

⁴ Ibid., pp. 629-647.

popular character dealing with a wide variety of intellectual, moral, physical, and social topics.

According to the former Under-Secretary of Public Education, Moisés Sáenz, one of the most significant tendencies in university education in Mexico is its approach to the people,⁵ which is being attained through the extension courses and also through the re-organization of all courses offered. The guiding principle is the same as that underlying the Federal Government School program—conformity to the actual needs of the nation.

The total enrollment in 1928-1929 was 7527 students, who received instruction through 726 professors and 194 assistants.

⁵ *Reseña de la Educación Pública en México en 1927*, Publ. de la Secría. de Ed. Púb., Vol. XVIII, No. 13, Mexico, D. F., 1928, p. 37.

CHAPTER VII

THE DEPARTMENT OF FINE ARTS

The Department of Fine Arts¹ functions chiefly through the bureau of Solo and Chorus Singing, the People's Night School of Music, the bureau of Physical Education, and the bureau of Drawing and Practical Arts. The music, arts and crafts, and physical training taught in the federal urban and semi-urban schools are handled or supervised by representatives of this department and are consequently closely correlated with each other and with the other cultural interests of the federal Department of Education. Frequent exhibitions and concerts are held under the auspices of this division of the federal Department of Education for the multiple purpose of showing what is being accomplished, of maintaining a high degree of uniformity in the various activities, of suggesting ideas and means of improvement for the teachers, and of gaining the interest and cooperation of the people as a whole in their own cultural advancement.

In 1929 the Bureau of Solo and Chorus Singing, with 130 trained teachers and five supervisors, gave all music instruction in 156 schools both in and out of the capital, in the National Normal School, in the School for Indian Youths, and in six evening schools; and supervised the music instruction in 300 incorporated plants. There were 62,560 boys and girls who received instruction in music during the school year. There are also 11 chorus centers in which 3185 working men and women were given instruction in singing and instrumental music. In order that the instruction may be uniform, the supervisors hold weekly conferences with the music teachers of their district and also conduct a model class in technique.

An indication of the activity of this bureau is evidenced in 289 concerts held during 1928-1929. One of these was

¹ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, pp. 289-321.

held in the National Stadium in Mexico City, 5000 boys and girls taking part. Another, held in the Monumental Amphitheatre of Chapultepec, offered chorus selections of 2000 voices—all workingmen. On Mother's Day and Arbor Day, concerts were held in all Federal schools. During the same year an orchestra composed entirely of teachers was organized and this body, with the Classic Chorus of the Department—similarly composed—participates in all major concerts. On Sundays the workingmen's chorus centers hold concerts in the public parks before large audiences. Copies of musical compositions are sent to foreign countries and to the Directors of Federal Education in the Mexican States, with the view to popularizing Mexican music.

The People's Night School of Music was established for the purpose of providing the laboring classes with artistic culture through the popularization of knowledge conducive to the correct interpretation and execution of musical, dramatic, and choregraphic compositions. The offerings in this school are of an eminently practical character, so that persons of limited resources may receive such instruction as will enable them to live immediately a fuller and more enjoyable life. A correlative aim of the instruction offered is to lead the masses to respectable and honest forms of diversion by inclining them toward the artistic entertainment made known to them through the activities of the school. To this end numerous concerts in which glee clubs, orchestras, and dancing classes participate are held in public parks and halls. The following courses are offered:²

Obligatory: Choral Singing; Solo Singing and Theory of Music; Elements of Rhythm and Expression; Popular Chorus Singing.

Optional: Opera chorus; Piano (two courses); Stringed Instruments (violin, cello, bass viol, viola, etc.); Common Instruments (mandolin, guitar, etc.); Wind Instruments; Band Music; Elocution and Scenic Practice; Æsthetic Dancing.

In 1928-1929 the People's Night School of Music had a total enrollment of 1328 students and an average daily class

² Boletín de la Sec. de Ed. Púb., Vol. V, No. 1, Mexico, D. F., 1926, p. 60.

attendance of 700, most of whom are of the working classes.³

The Bureau of Physical Education extended its operations beyond the boundaries of the Federal District in December, 1928. This extension was effected with a view to the establishment, with the cooperation of the respective local authorities throughout the republic, of athletic fields for the use of the schools and the community, the organization of a great national rivalry in sports and athletics intended to draw the participation and interest of the rural and urban masses, and the establishment of athletic sports and games in all the schools of the nation—rural and elementary, Federal and State.

During the school year of 1928-1929 the Bureau of Physical Education, through the agency of 200 teachers, 47 assistants, and 8 supervisors, had complete charge of the athletic activities of 121 federal schools (elementary, secondary, technical, and the National Normal School), reaching over 30,000 pupils.⁴ Through the graduates of the National Normal School and the teachers afterwards prepared by these graduates, the department is able to extend to all parts of the nation its policy of making uniform outdoor games and sports the principal vehicle of physical education. Where formerly all physical culture in Mexican schools was of the gymnasium or indoor type of calisthenics and drill, organized games such as basketball, football, baseball, and volleyball, together with swimming and training for track events now receive almost undivided attention in the school and community alike.

The Bureau of Drawing and Practical Arts directs the work in that field in 146 schools of the Federal District and the states. It prepares the courses of study, provides special teachers for the different subjects, and furnishes the necessary supervisors to keep the work going on in an efficient manner. Of a total of 77 teachers, eight are assigned to duty in the National Normal School of Mexico City. The rest have charge of the drawing and art work of the federal

³ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mex., D. F., 1929, p. 204.

⁴ Ibid., p. 315.

schools in the District. Many exhibitions of the work of federal school pupils, in pencil, ink, charcoal, pastel, oil, and water color, are held in the national and state capitals and in foreign countries. To numerous school systems, colleges, and universities of the United States, smaller collections have been sent, 52 being shipped in the month of September, 1929.⁵

This Bureau also has charge of the decorations for school fairs and entertainments, the scenery and stage settings for the school theaters, and whatever other art work may from time to time be required by the Department of Education. It publishes a children's magazine under the title of "Pulgarcito" (Tom Thumb), the illustrations of which are made entirely by the school children.

Since February of 1929 the Open Air Schools of Painting have been under the direction of this bureau.⁶ The first of these Open Air Schools was established by the artist Alfredo Ramos Martínez at Santa Anita in 1913. In 1925 four were functioning in the Federal District and an exhibition showing the results of two months' work proved such a success that the establishment of three more was approved.

According to the painter Alfredo Ramos Martínez, the greater the purity of the Indian race, the greater the purity and originality of the art production of the pupil.⁷ The four schools existing at that time, 1926, were located at Xochimilco, Tlálpam, Guadalupe Hidalgo, and Churubusco, and the percentages of pure Indians were 100, 70, 50, and 50, respectively. The artistic expression of the Xochimilco pupils far surpassed that of the other three groups, which were composed of varying ratios of Indians, whites, and mestizos. The Tlálpam pupils fell between the all-Indian group and the 50-50 groups of the remaining two schools.

In these schools there are pupils of all ages, both male and female. The pure Indians seem to have lost none of their

⁵ Boletín de la Secretaría de Ed. Públ., Vol. VIII, No. 8, Sept. 1929, Mexico, D. F., p. 84.

⁶ Boletín de la Secretaría de Ed. Públ., Vol. VIII, No. 2, Feb., 1929, Mexico, D. F., p. 81.

⁷ Monografía de las Escuelas de Pintura al Aire Libre, Publ. de la Secretaría de Ed. Públ., Mexico, D. F., 1926, p. 9.

ancient art; they still reveal the same predominant characteristics of expression, forcefulness, and originality that may be seen in the temples and monuments and other relics of the Aztec and Mayan races. An interesting feature in the production of the indigenous pupils is that the girls show the same strength of line, the same masculine touch, as the boys and the men. Their work is entirely masculine. Another striking point that has been evidenced in the production of these schools is that almost all who have so far enrolled have demonstrated a considerable degree of talent along artistic lines.

There are no entrance requirements to these schools of painting. Anyone, regardless of age, sex, or race, may enroll. The necessary material is provided free of charge and the pupils are assigned a place from which to paint. The schools are open morning and afternoon and the intervention of the teachers is limited to watching for the finished product and preventing the pupil's being influenced by the work of others. It is not even permitted that the pupils see the master paint his own pictures. Absolute freedom is given in the selection of what to paint, in the medium employed, and in the execution of the work. The personality of the pupil is the sole key to the whole activity of the school. In this way their production bears the natural and unstudied stamp of creative performance that is indifferent to the "good" and the "bad"—the eternal postulate of art.⁸

The free Schools of Sculpture are likewise under the direction of the Bureau of Drawing. Like the Open Air Schools of Painting, these schools were founded to encourage the remarkable aptitudes of the people along artistic lines—sculpturing and wood carving constituting their entire offering. Here, too, the pupils are permitted to follow their individual inclinations. They select the subject, the material, and the instructor's task is confined to suggestions as to how to secure the desired effects.

⁸ Salvador Novo, in *Monografía de las Escuelas de Pintura al Aire Libre*, Pub. de la Secretaría de Ed. Púb., Mexico, D. F., 1926, p. 12.

Besides the school in Mexico City, there is another in the town of La Magdalena, District of Texcoco, State of Mexico. Practically all the inhabitants of the region are pure Indians, who exhibit a peculiar interest and ability for such work. As in the schools of painting, the results have been and continue to be most gratifying.* The artistic ability of these descendants of the tribes who designed and erected the magnificent palaces and monuments that are still being uncovered in Mexico today, seems to be as great and as original as that of the ancient Aztecs and Mayas.

From the very beginnings these schools of painting and sculpture have been a marked success. Frequent exhibitions of pupils' productions are held, both in Mexico and abroad, and press comments have everywhere been most laudatory. Through the medium of such establishments the Federal Department of Public Education is succeeding in arousing a love for things Mexican, a spirit of patriotism—of Mexican nationalism. Ideas of racial or class superiority are being supplanted by new concepts of equal opportunity for all—rich and poor; white, mestizo, and Indian.

Under the direction of the Department of Fine Arts there is also the National Museum of Archaeology, History and Ethnography. The personnel of the museum offers courses in Archaeology, Ethnography, Mexican History and Language, conforming to the programs prescribed by the department of Philosophy and Letters of the National University. Numerous lectures and conferences are given and detailed studies relating to the various lines of investigation and research are published by the Department of Education. An office of General Superintendence of Artistic and Historic Monuments is maintained for the purpose of locating and preserving buildings, statuary, and other articles of national interest and significance. Under the direction of this office 13 museums are maintained in different parts of the republic for the collection and preservation of articles found in the respective localities. In 1928-1929 these museums were visited by 137,354 persons.

* El Sembrador, No. 11, Nov. 15, 1929, Mex., D. F., p. 8.

Taken as a whole, the Department of Fine Arts developed its cultural program through 800 exhibitions, the presentation of 2665 cinema films, and 351 lectures.¹⁰ These activities together with the descriptions and explanations afforded visitors in the above-mentioned museums and in the National Museum of Mexico City are achieving much in the way of creating a spirit of patriotism among the people. Numerous delightful means of finding recreation and diversion are laid before the masses, and many individuals are finding their vocations in the fields of music, dancing, and the arts.

¹⁰ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. of Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, p. 321.

CHAPTER VIII

THE DEPARTMENT OF PSYCHOPEDAGOGY AND HYGIENE

The activities of this department are concerned with the scientific study of the mental and physical development of the federal school pupils. Founded in 1925 the department is composed of two major sections: one of Psychopedagogy and one of School Hygiene, each under the direction of a head official directly responsible to the head of the Department.

The section of psychopedagogy performs its duties through four subdivisions: school anthropometry, mental testing, pedagogy, and biometry. Since the creation of the department this section has been carrying on a series of studies with a view to determining the norms of physical, mental, and educational development in the urban schools of the Federal District; in August, 1929, it had completed its work in connection with the physical. It has adapted a number of standard intelligence scales and tests for purposes of classification and selection, and the verification of the mental status of the retarded, and has prepared and standardized achievement tests in the common school subjects to render more objective and accurate the grading and promotion of the pupils.

For the past two or three years the section of psychopedagogy has been working in cooperation with the subdivisions of the Federal Department of Public Education in the elementary and secondary fields. The various tests have been administered to thousands of pupils of all ages and the results have been utilized to improve educational conditions in all federal schools. Teaching methods and other school procedures are being adapted to the individual differences revealed by these tests in ability, interests, and physical condition, and a series of pamphlets dealing with the activities and findings of all four subdivisions of the section of psy-

chopedagogy is being prepared for publication. The principal object of these pamphlets is to inform the Mexican teachers of the existence and uses of these means of measuring the physical and mental development of their pupils.¹ A report on the results of a series of tests and examinations given in various technical schools is likewise in preparation. These findings are to be employed in remedying instructional evils and as an aid to the students in the selection of their vocation.

Among the tests adapted may be mentioned: the Fay Intelligence Test, the Descœudres Language Test, the Binet-Simon Scale, the Haggerty Reading Examination, the Standard Achievement Tests, the Army Beta, the Otis Test of Arithmetical Ability, and the Stenquist Mechanical Aptitude Tests.² Several of these tests, having been administered extensively in the schools of Mexico City, are now being considered for adoption as the official means of pupil classification throughout the Republic. Numerous new tests are in the process of preparation—tests having to do particularly with ability in reading, writing, and computation, and with achievement in other constant subjects of the school offering.

The section of School Hygiene is composed of the bureaus of school medical inspection and school breakfasts, the school polyclinic comprising skin, eye, ear, nose, throat, and tooth dispensaries, a pharmacy, a clinical laboratory, and a special school annex for children afflicted with scurvy.

A corps of 22 physicians and 22 nurses examine the children of the federal school. A special Health Record is provided for each child and in these booklets the medical corps enters its observations and recommendations. The school buildings, grounds, and equipment are also inspected and medical service is extended to the teachers. These same doctors provide medical attention to all employees of the Federal Department of Public Education, and examine candi-

¹ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. de la Secría. de Ed. Púb., Vol. XXII, No. 4, pp. 351-352.

² Sáenz, Moisés; Reseña de la Ed. Púb. en Méx. en 1927, Publ. de la Secría. de Ed. Púb., Vol. XVIII, No. 13, pp. 30-31.

dates for retirement and pension. Private institutions are required by law to employ the services of a school physician when their enrollment equals or exceeds a total of 100 pupils.

In addition to the activities of the Department of Psychopedagogy and Hygiene, a number of societies and clubs have been organized in Mexico City and the Federal District in general for the promotion of the health and well-being of the school children. The Federal Society for the Protection of the Child was organized in 1924 and has exercised considerable influence in the health program of the capital city schools. The Junior Red Cross enjoys an extensive membership among the school population and is heartily encouraged by the Department of Education. An organization of Mexican Boy Scouts holds to the same fundamental principles as our own Boy Scouts, with additional professions based on Mexican traditions and history, and is under the general direction of a scoutmaster whose salary is paid by the Department of Education. A moral code for the Mexican child has been adopted for all official schools of the federal district; a "Child's Week" has been instituted for observance in federal schools; and specially trained women make regular visits to the homes of the pupils to help the parents in matters pertaining to the health of their children. As can readily be seen, the federal government is determined to make Mexico a nation of sound, healthy citizens, and rather than rely wholly on the physical education prescribed for its schools, it is wisely enlisting the goodwill of the parents and the voluntary cooperation of the children themselves. Coupled with the professional services of the Department of Psychopedagogy and Hygiene, these activities constitute a health program of which the Mexican government may well be proud and hopeful.

Since 1922 the Federal Department of Education has been providing free breakfasts to needy pupils in Mexico City's elementary schools. A physician and a nurse have charge of this service and are required to study and report on the physical and mental development of the children thus treated. Approximately 2000 children received breakfasts daily in

1928-1929, but those in charge maintain that this number should be at least doubled in order to take care of the army of pupils who, because of undernourishment and malnutrition, are unable to progress satisfactorily in their school-work.³

The personnel of the various dispensaries is made up of specialists in the respective branches, assisted by an ample retinue of trained nurses. Of the 121,023 pupils examined in the elementary schools of Mexico City during 1928-1929, 21,630 received treatment in the dispensaries as follows: Skin, 2544; Eye, 9671; Dental, 5559; Ear, Nose, and Throat, 2559; School for Skin Diseases, 1297.⁴

To encourage the increasing activity of the state governments in this type of service the federal department of school hygiene has prepared and published a detailed program of organization and administration of such a service. Frequent inquiries were received from state authorities, and the suggestive program prepared in answer by a physician of long experience in the schools of the capital, should go far to promote improved hygienic conditions in the schools maintained in the separate states. A course in physical education, extending from the kindergarten through the Secondary School, has also been prescribed under the direction of this department.⁵

The activities of the Department of Psychopedagogy and Hygiene are considered of highest importance by those responsible for the modern educational movement in Mexico. The intimate positive relationship between the condition of the pupils' health and their ability for intellectual work is being more and more generally recognized, and there seems to be a tacit agreement that a "good education" cannot be provided without adequate adjustment of instruction to the needs of the school population. All of the physicians and teachers in the federal service recognize the great interde-

³ Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. de la Secría. de Ed. Púb., Vol. XXII, No. 4, Mexico, D. F., p. 381.

⁴ Ibid., p. 380.

⁵ Ibid., p. 381.

pendence of the mental and the physical, especially during childhood and adolescence when habits, attitudes, and ideals are in the process of formation and when the school is, perhaps, the most potent factor in the pupil's life. For this reason the elementary and secondary schools are at the present time receiving the almost total attention of the department of Psychopedagogy and Hygiene.

This branch of the Department of Education not only has charge of the study of mental and physical development and subsequent homogeneous grouping in the schools, but it also determines the length of the recitation period, the maximums and minimums of the programs of study, the adequacy of the activities included under the new order of instruction (the Activity method), the means of appraising educational achievement, the means of assuring just and accurate promotion, and the remedial measures applicable in the different cases of retardation. It is charged, also, with the analysis of professions and trades, to ascertain the specific physical, social, and mental activities demanded by each. Employing the data obtained from mental and physical measurements combined with teachers' estimates as to achievement, interests, and needs, the department is able to provide valuable assistance to the pupils in their selection of a vocation. Contact is had with numerous industrial organizations, and the pupils, through part-time continuation courses under adequate supervision, perform the actual duties of their preferred occupations.*

* La Ed. Púb. en Méx. a través de los Mensajes Presidenciales, Mex., D. F., 1926, pp. 433-435.

CHAPTER IX

THE DEPARTMENT OF SCHOOL LIBRARIES¹

The Federal Department of Public Education maintains a department of libraries which works for the cultural advancement of the Mexican people through the diffusion of books and pamphlets of popular interest and utility, through lectures given in the public libraries, through moving picture exhibitions, and through the distribution of bulletins, magazines, and periodicals of varied nature. To the end of securing uniform methods of classification, cataloguing and other routine work connected with its libraries, the department offers a course in Library Science, which includes library organization and administration, classification and cataloguing, library information, and bibliography. The classes are in charge of employees of the Department, specialists in the branches entrusted to them. Similar courses are offered by correspondence, and 250 students, largely elementary school teachers in different parts of the republic, are pursuing such work. In 1920, 39 popular, 15 school, and 18 unclassified libraries existed in Mexico.²

From the creation of the Library Department in 1920 to December 31, 1923, libraries were founded as follows:³

928 popular libraries	with 105,681	volumes
352 industrial	29,927	
333 school	23,137	
234 combination	18,987	
64 circulating	3,972	
1911 libraries	with 181,704	volumes

During this period a total of 3140 libraries in Mexico received donations of books and other publications from the Department of Education to the amount of 274,309 volumes. In addition, 359 libraries in foreign countries received 18,303 volumes.

¹ Memoria que indica el estado que guarda el Ramo de Educación Pública el 31 de agosto de 1929, Publ. de la Secría. de Ed. Púb., Vol. XXII, No. 4, Mexico, D. F., pp. 325-348.

² Boletín de la Secría. de Ed. Púb., Vol. I, No. 4, 1923, p. 307.

³ Boletín de la Secría. de Ed. Púb., Vol. II, Nos. 5 and 6, Mexico, D. F., 1924, p. 319-321.

This activity of the Federal Department of Education has continued. In the year 1925, 1067 libraries were founded with 45,399 volumes, and 524 were enriched with 24,202 volumes.⁴ In 1926, 604 libraries were founded and 692 were enriched, with a total of 69,795 volumes.⁵

In 1925 Mexican libraries were classified as popular, school, industrial institutional, rural, and children's. Popular libraries are stocked with books of all kinds, the greater percentage being for minds of average culture. School libraries have texts, other volumes appropriate for school use, and reference books for pupils and teachers. Industrial libraries—those furnished to labor union offices, workers' clubs and similar organizations—contain principally books dealing with arts, crafts, trades, etc., according to the respective group for which intended. Institutional libraries, founded in military barracks, prisons, cultural and recreational societies and athletic associations, contain works on literature, ethics, history, biography, and educational technique. Rural libraries are composed of books carefully chosen to suit the needs of the country masses, both school children and adults. The selection is made according to the respective occupations, manners, products, and needs of the community. Children's libraries are equipped with appropriate literature ranging from colored picture-books with fairy tales and rhymes to more advanced material useful in the development of the projects assigned in the schools.

Since 1926 especial attention has been given to the establishment of popular and rural libraries. On July 1, 1929, a circular letter was sent to the State Directors of Federal Education, to Supervisors, Principals of Model and Elementary and Regional Normal Schools, requesting detailed information concerning the population of each town, occupations of the inhabitants, degree of culture, and the names of the teachers in the various schools, together with those of

⁴ Noticia Estadística sobre la Ed. Púb. de Méx. correspondiente al año de 1925, Publ. of the Sect. of Pub. Ed., Mex., D. F., 1927, Table No. CII.

⁵ Noticia al año de 1926 Mex., D. F., 1928, pp. 420-421.

the members of the School Boards. Basing its selection of books on the data thus gathered the Library Department now sends appropriate volumes to each region. The teacher is placed in charge of the necessary "advertising" concerning the libraries to be installed, and the School Boards are charged with the necessary vigilance in respect to the care and preservation of the books.⁶

The establishment of rural circuit schools has facilitated the founding of moving libraries. In the school that serves as the central plant of the circuit, a library is installed with a section of books which are permitted to circulate in the region supporting the other schools of the circuit. The teachers and pupils take it upon themselves to deliver the books to the communities and farms thus served. After a specified period of time, conforming to a prescribed circulation schedule, the volumes are collected and sent to another locality.

In order that the pupils of the Federal schools may acquire the habit of reading, a "reading hour" has been instituted to awaken a fondness for books as a means to recreation and pleasure, as a source of useful information and assistance in life's problems, and as a guide to cultural advancement.

The Library of the Department of Education in Mexico City maintains an annex in which are to be found all kinds of books, pamphlets, magazines, reviews, newspapers, circulars, decrees, instructions, and regulations concerning education. In 1929 this annex contained over 3000 volumes, classified and catalogued in approved fashion. To facilitate the acquisition of adequate professional technique and background by the teachers of the Federal District, arrangements have been made whereby these books may be removed to the homes for specified periods of time.

The official organ of the Library Department is "The Book and the People." This publication has given valuable service toward advertising the most important books available in the libraries, by furnishing a brief résumé of the con-

⁶ Mem. que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Pub. of the Sec. of Pub. Ed., Vol. XXII, No. 4, Mexico, D. F., 1929, p. 326.

tent and an analysis of the principal chapters. To encourage the reading of the works of Mexican writers, the publication of the bulletin "Bibliographical News" was started and it has been well received not only in Mexico itself, but in other countries as well. Distributed among libraries and cultural centers of various kinds, it has succeeded in arousing enthusiasm for the national literature and in stimulating sales, as evidenced by the orders received for volumes described therein.⁷

Mexican legations and consulates as well as a number of foreign institutions such as colleges and universities, labor organizations, public and school libraries, and Mexican colonies or settlements, have been endowed with small libraries with a view to diffusing a knowledge of Mexican art, literature, and progress under contemporary revolutionary governments.

In an article entitled *The Educational Rôle of the Library in the Republic of Mexico*, appearing in Volume LXII, Number 8, of the *Bulletin of the Pan-American Union* (August, 1928) Miss Esperanza Velázquez Bringas, former Chief of the Library Department, Ministry of Public Education in Mexico, gives the total number of libraries at the end of 1927 as 1345 popular, 970 school, 797 industrial, and 503 rural.

In 1928, 438⁸ new school libraries were founded, and in 1929, 334⁹ more, making a total of 4387 at the end of the school year, 1928-1929. During the same year 24,830 volumes were distributed by the department: 12,152 to new libraries, 8900 to old ones and 3778 to institutions in foreign countries, private libraries, and public offices.¹⁰

⁷ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Pub. de la Secría. de Ed. Pub., Vol. XXII, No. 4, Mexico, D. F., p. 328.

⁸ Boletín de la Secría. de Ed. Púb., Vol. VII, No. 8, Mexico, D. F., 1928, p. 263.

⁹ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Pub. de la Secría. de Ed. Pub., Vol. XXII, No. 4, Mexico, D. F., p. 345.

¹⁰ Ibid., p. 345.

This almost phenomenal growth in number and size of Mexico's libraries has occasioned a serious effort to provide modern buildings and equipment for their housing. Extra wings have been added to many to accommodate the increasing numbers of patrons. Cement floors have been laid in others to preserve the books from rodents and insects and to provide a cooler and more pleasant atmosphere for the readers. Still others have had new windows cut in and various other improvements in the line of lighting, ventilation, and sanitation. Working in close harmony with the schools, the Department of Libraries is proving to be an able factor in the regeneration and enlightenment of the Mexican masses, and gives promise of becoming an even greater and more potent instrument of culture as the schools turn out larger and larger percentages of the population capable and desirous of making use of the volumes to be had.

CHAPTER X

OTHER ACTIVITIES OF THE EDUCATION DEPARTMENT

Another important factor in the educative movement of the Mexican federal government is the Bureau of Radio Extension. The activities of this branch of the Department of Education are of two kinds: (1) for the schools and (2) for the public in general. So far, the main schools that are served are the kindergartens, the elementary, and the rural schools. For these schools, stories, readings, chorus songs, and children's games are broadcasted. With the collaboration of the Department of Rural Schools, Federal Elementary Schools in the States, and the Cultural Incorporation of the Indians, special courses are broadcasted for the benefit of rural teachers.

The programs offered for the interest of the public in general are designed for (1) urban workers, (2) rural workers, and (3) housekeepers. The city workers are offered programs prepared especially for their intellectual level, intended to better their economic condition by diffusing information of practical utility. These programs deal with trades, industrial arts, hygiene, and physical culture. For the rural workers, lectures and instructions are given on such topics as agriculture, horticulture, aviculture, apiculture, sericulture, and applied geography. Housewives are offered courses in domestic science, child hygiene, and home treatments for cases of emergency. For all three groups, additional offerings dealing with the social sciences, fine arts, and literature are transmitted for their æsthetic advancement. Further programs composed of lectures by professors directed by the Bureau of University Exchange, on Library Science, Astronomy, Psychology, Art, are broadcasted for those whose culture is of a more extensive character.

During the year 1928-1929, 615 musical concerts were broadcasted, the majority of selections rendered being strictly

Mexican music. In this same year 35 receiving sets were delivered to the Bureau of Radio Extension by commercial houses in payment of advertising services. The total value of these sets amounted to 12,696 pesos.¹

*The National School Savings and Loan Service.*²—The National School Savings and Loan Service was established by presidential decree on May 16, 1925. Its principal purpose is the development in the child of the consciousness of his individuality and his own responsibility by bringing him to recognize the value of money as a factor in well-being and progress, and to prepare him to become a worthy member of society and of his country.

Each pupil of the federal elementary, secondary, and technical schools is required to deposit weekly from 5 to 10 centavos, and voluntary deposits are permitted in any amount at any time. The deposits are made through the teachers who forward the weekly receipts to the proper authority. Three hundred thirty-nine schools were taking advantage of this service in 1929, the depositors numbering about 100,000. On July 31, 1929, the total amount thus deposited was 396,130.52 pesos (\$198,065.26 U. S. Currency), the average monthly deposit during the school year ending on that date being 12,000.00 pesos. Students finishing school at the close of the year 1928-1929 were refunded savings which, with accumulated interest, amounted to 37,555.14 pesos (\$18,777.57 U. S. Currency).

From the beginnings of this service in 1926 all savings were deposited in the Bank of Mexico, but in view of the low rate of interest paid by such institutions, the management of the service in 1929 proposed and effected the placement of the deposited funds in three classes of loans—mortgage and security loans and promissory notes. From the first two an annual interest of 13% is accumulated, and from the third, 18%. By this new disposition the total holdings in-

¹ Memoria que indica el estado que guarda el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. de la Secría. de Ed. Pub., Vol. XXII, No. 4, Mexico, D. F., pp. 535-542.

² Ibid., pp. 591-592.

creased to 487,287.26 pesos (\$243,643.63 U. S. Currency), by September 30, 1929.³

All operations of the National School Savings and Loan Service are subject to the approval of the Administrative Council, under the law regulating credit institutions and under the supervision of the National Banking Commission. Of the interest earned, 70% goes to the depositors, 10% to the Guaranty Fund, 10% to the Reserve Fund, 7% to the members of the Administrative Council, and 3% to the Director.

Cooperative Societies.—In his Message to the Mexican People on September 1, 1929,⁴ President Emilio Portes Gil called attention to the new orientation in the life of the Mexican school—the teaching of cooperativism. Expressing the opinion that the strongest hope for the economic redemption of the working classes resides in the organization of cooperative societies, he pointed out that many such enterprises had failed because of insufficient knowledge of their proper organization and operation. The people must be educated to them in order to know how to take advantage of their benefits. For this purpose, every teacher, even the teacher of the most isolated rural school, must include instruction in “cooperativism” in his daily work. A National School of Cooperativism, he declared, would furnish the nucleus for the movement.

In addition to the 132 cooperative societies, with over 6000 members connected with the technical schools, there were in the Federal District at that time 76 similar organizations of pupils and 13 of parents connected with the federal primary schools. In the federal primary schools established in the states and territories were 258 pupil cooperative societies and 100 adult. The federal rural schools counted 1811 pupil societies and 824 adult.⁵

³ Boletín de la Secretaría de Educación Pública, Vol. VIII, No. 8, Mex., D. F., 1929, pp. 8-9.

⁴ El Sembrador, No. 10, Sept. 5, Mexico, D. F., 1929, pp. 20-21.

⁵ Ibid., p. 20.

For centuries the Mexican small farmer was ruthlessly exploited by great landowners who ground out of them everything—possessions, happiness, spirit, hope. With the Revolution came freedom from this subjection and oppression; but complete ignorance of how to benefit by this new-found independence soon placed the emancipated peons and urban workers in the toils of new enemies: the money lender, the monopolist, and the retail merchant.⁶

The money lender takes advantage of the poverty of the peasants to lend them funds for crops at an exorbitant rate of interest, and then collects almost the entire proceeds of the harvest. The monopolist takes advantage of the simple trust of the country men, deceives them as to the true values of their products, and buys at his own low figure. The retail merchant exploits their ignorance by forcing them to pay unreasonable prices for commodities of utmost necessity and too often crowns the deal by delivering an inferior quality of merchandise. To remedy such abuses as these, the Federal Government is organizing and encouraging cooperative societies throughout the Republic.

Model constitutions for these organizations are provided by the Department of Public Education and a General Law of Cooperative Organizations has been in force since February 10, 1927. The cooperative society law regulates the constitution, the management, and the operation of these organizations.⁷

⁶ *El Sembrador*, No. 8, Aug. 5, Mexico, D. F., 1929, p. 3.

⁷ Memoria que indica el estado que guarde el Ramo de Ed. Púb. el 31 de agosto de 1929, Publ. de la Secría. de Ed. Púb., Vol. XXII, No. 4, Mex., D. F., 1929, pp. 145-157. This reference gives in detail the constitutional bases for School Cooperative Organizations.

CHAPTER XI

SYNTHESIS

In the preceding chapters, following a brief resumé of the social, economic, and political conditions in Mexico prior to the educational reform of 1921, the principal activities of the Federal Government in educational matters were treated in some detail. Several subdivisions of the Department of Public Education, namely, the bureaus of Publications, of Archæology, of School Statistics, of Administration, and of Construction and Maintenance of School Buildings, received no extended treatment since their functions are indicated quite plainly in their names. Others, however, in which far-reaching changes in educational practice have been effected, were discussed at considerable length, for they constitute the backbone of the present-day educational program of the Mexican Federal Government.

A remarkable transformation has taken place in Mexico within the past decade. It is, indeed, still in progress. This is evident not only in connection with education, but in practically every phase of Mexican life, starting with the government itself, which has changed from a most plutocratic dictatorship to a form of democracy in which the rights and privileges of citizenship are being extended to the lowliest Indian. The federal program of public education, however, is the principal means by which this democracy is being achieved.

Since the reform inaugurated in 1921, remarkable strides have been made in the field of education. On September 1 of that year President Obregon, in a message to Congress,¹ declared that public education is the most important function of government, the noblest institution of the day, to a high degree productive of social and economic well-being as well

¹ Puig Casauranc, J. M., *La Educación pública en Méx. a través de los mensajes presidenciales*, Publ. de la Secría. de Ed. Púb., Mexico, D. F., 1926, p. 211.

as of moral uplifting and national culture. Its wide diffusion throughout the country, he said, would make impossible the return of a tyrannical rule in Mexico. Under Obregon a constitutional amendment created the present Department of Public Education and made its Head a cabinet member. Under Obregon, also, Don José Vasconcelos, Mexico's first Secretary of Public Education, initiated the rural school movement. Obregon's successor, General Plutarco Elías Calles, himself an ex-teacher and consequently able to exert profound influence over the teaching situation both during his own administration and afterwards, put into action the actual movement for national public education and made it the outstanding example of advanced theory and practice that it now is. The successors of Calles, Don Emilio Portes Gil (Provisional President, 1928-1930) and Don Pascual Ortiz Rubio (President, 1930-) have continued his educational policies.

The principles underlying the present-day educational activities of the federal government are essentially the same as those advanced by educational leaders of Mexico for nearly half a century. In a message² delivered in Mexico City, outlining the activities of his administration from December 1, 1884, through November 30, 1896, Dictator-President Porfirio Díaz expressed the following opinion:

In order that democracy may be changed from the category of an abstract ideal to a concrete reality, from a merely theoretical formula into a practical institution, it is necessary to exalt in man the consciousness of personal and collective dignity, to show him and make him understand the number and kind of his rights as well as the character and importance of his obligations; it is necessary to endow the people with a practical and solid criterion which will permit them to correctly discern their true interests, to choose wisely the political party with which they desire to align themselves, and to ably select the mandatary in whose hands they are to deposit their confidence. All these requirements, without which neither liberty nor democracy is possible, demand that the people be educated . . . that their intelligence be sharpened by contact with science, that they learn through history and civic instruction to know the age in which they live and to guide their way through it, that they learn through moral teachings of what true virtue consists, and that they may, through elemental but fundamental instruction, have better tools for their work and better arms for the struggle for existence.

² *Ibid.*, pp. 65-67.

Díaz maintained that in order to have the desire for liberty and democracy become a vital and enduring urge in society, the impulse must be internal and personal, born of conviction and nourished by true public and private interests. For this reason he advocated that education be considered as one of the most sacred duties of a democratic government. The educational activities of his long rule, however, were confined to the Federal District and the National Territories, and even within these narrow limits public schools were accessible only to the élite. It remained for the Revolution to place educational opportunity within the reach of the vast masses throughout the republic.

Regarding the aims of Mexican education today, a quotation from Moisés Sáenz^a is most enlightening:

There is in Mexico a cultural tradition which the school cannot and should not fail to recognize. In former times, our land was the seat of noble and admirable civilizations. They declined in power and disappeared, but unmistakably they left behind a sediment of culture. It would be foolish to ignore it, and even more foolish not to take advantage of it. To preserve the worthwhile elements of the indigenous cultures and to amalgamate them with the new concepts and new manners of modern civilization is, therefore, a task which directly concerns the Mexican educator. The Castilianization of the Indian, that is to say, to give a medium of communication to a third of the Mexican population who cannot understand us because they do not speak our language, is, within the same order of ideas, another of the most transcendental problems we must work out. To so organize the schools that they may retain their (the Indians') friendship and acquire a clear understanding of the great contemporary problems of Mexico—those relating to the Land, to Labor, to the Indian, to a democratic form of government—and to bring it about that by preserving this understanding they may avoid factions and petty bands, is yet another of the essential problems in the Mexican schools. It is also necessary to achieve economic improvement for our people. The Mexican school is gradually coming to see that it must make itself eminently vocational. This obligation is placed upon the school from three different viewpoints: because it was formerly theoretical and literalist and must be made real and practical; because our peoples have evident genius for the manual arts; and because they have been starving for centuries and only by producing can their hunger be sated.

Briefly expressed, Mexico aims to effect the fusion, socially, economically, and politically, of her Indians and whites and thus to evolve into a democratic nation on a solid, logical, consistent, and permanent basis. The immediate objectives

^a Sáenz, Moisés, *Reseña de la Ed. Púb. en Méx. en 1927*, Publ. de la Secría. de Ed. Púb., Vol. 18, No. 13, Mex., D. F., 1928, p. 39.

are a common language, improved economic conditions for all, and a vocation for each. The ultimate goal is a great democracy, capable of taking her place among the leading powers of the civilized world.

In a country such as Mexico, with conditions being as already indicated in an earlier chapter of this report, a sound system of education must necessarily start at the bottom and work upwards. And this is precisely the line of action evidenced in the educational program of the Federal Government. The millions upon millions of newly emancipated country and mountain folk, mestizos and Indians alike, are being reached either directly or indirectly through the rural schools, of which there were over 6000 in 1929-1930. In the cities and towns, elementary education is being provided in an ever-increasing degree, to the laboring classes; and secondary instruction, corresponding to our own Junior High organization and deliberately modeled on it, is gaining ground gradually. Mexican educators have been schooled in the most advanced principles and practices of modern times and the schools of the federal government reflect the training of these leaders, as well as their sincerity and patriotic zeal.

In all of the federal schools, although particularly in the rural school, the plant is a true social center, with numerous and powerful contacts with the community. The activities of the schools are such that the children attend them, not to be prepared for life but to live life. They are given practice in doing better those things which they have to do at home; they learn principles and skills conducive to self-development and to the appreciation of higher standards; and they learn to play and like athletic games designed to equip them with sound bodies and healthy minds.

The education extended by the federal government goes beyond school activities. It calls for the improvement of the whole community. It involves the adult as well as the child, the cultural as well as the vocational. The realization of the federal program demands the cooperation of all public agents and whatever other persons and elements the Department of Education can induce to lend assistance. The school plant

and the teacher are the basic units in this program, but other factors of most varied nature are brought into play. Alexis de Tocqueville⁴ has said that although laws are more efficient than physical circumstances for the maintenance of democracy, manners and customs are even more efficient. The federal Department of Education is striking directly at the root of the problem by re-organizing the customs of the people. And this is being accomplished through schools designed for the people of today. The traditions and customs of the ancient Aztecs and Mayas, their culture and their arts, are being stirred in the crucible of modern life along with those of the whites and more enlightened mestizos. Owing to the racial differences—not only between whites, mestizos, and Indians, but also among the Indians themselves, Mexico's problem is extremely difficult. A mass of unassimilated and unrelated ideas exists in the nation and the vast majority of people are not sure just what they want. There are rich and poor, educated and uneducated, honest and dishonest, ambitious and indifferent, industrious and slothful—folk of all kinds and all degrees of each kind. And out of this heterogeneous population so preponderantly unenlightened and almost completely Indian and breed, a psychological unity, a new nationality, is being moulded.

Every possible effort is being made to eliminate class prejudices. Civil rights and obligations, the workings of the national, state, and municipal governments, public utilities and innumerable other elements of society are dealt with in the schools according to the capacities of the pupils. Constructive activity for the common good and group activities of all sorts are continually emphasized. Intelligent citizenship is a most important aim—citizenship based on a higher standard of living, the social, economic and political rehabilitation of the community, and the reconstruction of the individual along economic and cultural lines—citizenship spiritually founded in Mexican soil, in Mexican tradition, in Mexican psychology, and in constantly increasing degree.

⁴ Democracy in America, Vol. I, Chap. 15, Century, 1898.

In view of the general apathy of the lower classes to the traditional form of education and to those who "possessed" it, the federal government has been waging an extensive campaign throughout the nation to awaken a feeling of absolute necessity for its educational offering. Aside from innumerable pamphlets, bulletins, and other publications dealing with educational matters and issued by the Secretariat of Public Education, radio programs are broadcast systematically in the interests of school and society; motion picture films of educational nature are widely distributed for presentation in schools, libraries, and other public places; model elementary schools are established in the larger cities and towns of the different states for demonstration purposes; series of lectures, conferences, and talks are held; evening schools are maintained for industrial workers and for farmers; open air schools are conducted, offering to the public unlimited opportunity to see how the new education, the "activity school," functions; free schools of painting and sculpture are maintained; and cooperative movements of most varied character are supported throughout the republic: school savings funds, cooperative stores, parent-teacher organizations, libraries, and others.

Closely related to these numerous activities is the program of adult education with which is associated the attempt to revive domestic and folk arts. As has already been indicated in various sections of this report, a more or less concerted effort is being made to improve the economic, social, and intellectual conditions of the adult masses. Since 1921 an extensive movement against illiteracy has been afoot, volunteers taking upon themselves the responsibility of teaching at least one illiterate to read and write. With the evolution of the federal rural schools and the demand for teachers to man them, the "cultural missions" were instituted, and their operations almost immediately spread to the entire community in which they were located. Vast collections of native arts—needlework, weaving, ceramics, painting, sculpture, music, and others—are now being shipped to the museums,

where the staff of the Department of Fine Arts lists, studies, exhibits, and prepares descriptions of all articles found to be of pure native design and workmanship. The production of these native articles is then assiduously encouraged whenever possible, through the Cultural Missions or other agencies. In the case of products for which there is no longer a demand, an effort is made to provide new applications for the raw materials. *Ixtle* (a fiber obtained from various tropical plants, such as *maguey* and *agave*) for example, which formerly was employed principally in making harness, bagging, and ropes, is now widely used in the manufacture of handbags, carpets, rugs, table covers, screens, and curtains, whose designs preserve the themes characteristic of the ancient Indian arts.

Night and Sunday classes are conducted for adults in a high percentage of the federal schools, both urban and rural, instruction being made attractive to the pleasure-loving men and women by its association with folk songs and dances, entertainments, illustrated lectures, and musical offerings. Rather than merely the three R's of the conventional and traditional school, education is conceived as the process of teachings people how to live. Emphasis is placed on health, citizenship, the dissemination of knowledge concerning appropriate crops and industries, improved methods of production, conserving, and marketing, and wise forms of recreation. The use of medicine for prevention and cure of diseases is slowly being accepted in place of the time-honored beliefs in witchcraft and magic. Vaccination is becoming more and more common. Sports and entertainments in open-air theaters are being used to combat alcoholism. Cooperative organizations are formed for social and economic purposes. Parent-Teacher Associations and other similar societies are organized with the aim not only of winning favor for the new education, but also to train the adult population in moral habits of cooperation and personal responsibility. No opportunity is slighted anywhere to instil the principles for which the Revolutionary Government stands. Like the peoples of all other races, the Mexicans are quite willing that their coun-

try should occupy a high place in modern civilization, and they are responding nobly to the efforts of their leaders.

Federal education in Mexico as evidenced in the foregoing summary, is remarkably democratic. The country is a republic with a constitution which, considered from a social-economic-political point of view, is, perhaps, the most Utopian document of its kind in the world. As Priestley remarks,⁵ it is too idealistic for practical use. Nevertheless, those provisions which are possible of attainment are being followed by post-revolution governments and considerable progress is being made toward the distant goals set up in the Constitution of 1917. The process may be a slow one, but there is no point in refusing to recognize actual advance, however slowly it may be realized. Commenting on the problems facing the Mexican government, H. K. Norton⁶ declared that the immediate domestic and international problems can be solved. He added:

The disposition of the immediate problems, however, is not all that is to be accomplished. Behind and beyond all that, and reaching far deeper into Mexican life, is the task of arriving at some stable form of government that can insure steady progress along the road that has been taken within the last year by the present government. That task is a monumental one, for it involves the political education of all but a small fraction of the Mexican people. This political education must be the outgrowth of a general education, the seeds of which have hardly been planted.

That these "seeds" are already taking root in a fertile soil is shown by the growth in school enrollment since 1912. From 133,831 in that year, which, despite the fact that the country was being torn by revolution, was twice the size of the 1900 enrollment,⁷ the number rose to 783,709⁸ in 1925, and to 1,191,829⁹ in 1928. Earlier chapters of the present report

⁵ Priestley, H. I., *The Mexican Nation: A History*, Macmillan, 1923, p. 442.

⁶ Norton, H. K., *What's the Matter with Mexico?* in *World's Work*, Vol. 57, No. 1, Nov. 1928, p. 55.

⁷ Barranco, M., *Mexico: Its Educational Problems*, Teachers College Contributions to Education, Columbia University, 1915, p. 56.

⁸ Puig Casauranc, J. M., *La ed. púb. en Méx. a través de los mensajes presidenciales*, Pub. de la Secria. de Ed. Púb. Mexico, 1926, Table No. 1 foll. p. 505.

⁹ Mem. que indica el estado que guarda el ramo de Ed. Pub. el 31 de agosto de 1929, Publ. de la Secria de Ed. Púb., Vol. 22, No. 4, Mexico, 1929, p. ix.

contain many more evidences of the successful outcomes of the educational activities of the Mexican Federal Government.

Following a visit to Mexico Dr. John Dewey writes as follows:¹⁰

It is a common complaint that the graduates of the former schools have marvelous memories, but no initiative and little independent responsibility. This fact has been cited to me scores of times as a convincing indication of the limits of the mentality of the Mexican. I am sceptical in advance of all such psychological generalizations; as long as pupils were dealing with traditional studies in the traditional way, the material was so isolated from their experience that memory was their sole reliance. Now that "activity"—not always to be sure with adequate organization or intellectual content—is the guiding principle, and the "project method" is all but officially adopted as the basis of the school program, there is sure to be a change. Practice falls short of ideals, and the program is much better executed in some places than in others. But I believe that the brightest spot in the Mexico of today is its educational activity. There is vitality, energy, sacrificial devotion, the desire to put into operation what is best approved in contemporary theory, and above all, the will to use whatever is at hand. . . .

In a lecture delivered before the Zentralinstitute für Erziehung und Unterricht, Berlin, in November, 1928,¹¹ Dr. I. L. Kandell sketched the educational situation in the United States and out of this background evolved the following ideals of an educational system:

1. Education must be universal and efficient; not only must every child of school age be in school but so far as a science of education and administration can make it possible, such education must yield definite results in the development of the child as an individual and as a member of society.

2. An educational system must provide for equality of opportunity for every individual compatible with his ability and intelligence; in other words, such a system not only cannot recognize any privileged class but must make special provision to meet the special needs of each individual.

3. Education must assist and stimulate the individual to go as far as his ability permits from the kindergarten to the end of the university. This means not merely the provision of free education but the provision of such a variety of choice and types of courses as will be of profit to the individual and at the same time to society.

4. Education must aim not merely at intellectual development, but must provide for the training and cultivation of character and personality. In other words, the corporate life and activities of a school community are regarded certainly as of as much importance as the intellectual training of the classroom.

¹⁰ Dewey, J., *Mexico's Educational Renaissance*, in the *New Republic*, Vol. XLVIII, No. 616, Sept. 22, 1926, p. 118.

¹¹ Published, under the name of *The Meaning of American Education*, in *Essays in Comparative Education*, Bureau of Publications, Teachers College, Columbia University, 1930, pp. 55-70.

These are the fundamental principles on which the American educational system rests, and which, as Dr. Kandel states,¹² have universal acceptance. Educators of the leading nations of the civilized world have moved away from the conception of the school as a disciplinary institution whose main function was to provide drill for mastering the rudiments of knowledge. In conformity with present-day political, social, and economic conditions, a new educational philosophy has been evolved which regards education as an instrument of democracy aiming to prepare all individuals for a useful life of service in whatever field they may enter and for intelligent and active participation in the increasingly complex life of the modern world.¹³

Dr. John Dewey, eminent educator and philosopher, is the most able interpreter of this modern conception of education for a democracy. Describing the ideal democracy as a "society which makes provision for participation in its good of all its members on equal terms and which secures flexible readjustment of its institutions through interaction of the different forms of associated life,"¹⁴ Dr. Dewey declares that it is the duty of such a society to provide a type of education that will inculcate and foster personal interest in social relationships and control, and such habits of minds as will bring about social changes in an orderly fashion. Social efficiency is conceived as the end of education—a social efficiency which Dewey holds to be synonymous with personal culture or the "capacity for constantly expanding the range and accuracy of one's perception of meaning."¹⁵ This is not the passive culture of earlier times, the mere possession of knowledge, but an active conception involving a moving goal and aiming at practical consequences that make for a better society and a better world. It is the capacity for re-organizing the world and is open to everyone. Culture thus conceived is

¹² *Op. cit.*, p. 61.

¹³ Cubberley, E. P., *The History of Education*, Houghton Mifflin Co., 1920, p. 780.

¹⁴ Dewey, J., *Democracy and Education*, 1916, p. 115. By permission of The Macmillan Company, publishers.

¹⁵ *Ibid.*, pp. 144-145.

no longer a barrier between classes but aims on the contrary at making every change contribute to a greater understanding, a better and fuller cooperation, and a more cordial goodwill among men.

It is just such a society and such a culture that Mexican educators are striving to attain for their country. The vast masses of peons in the rural districts and industrial laborers in the cities and towns, freed by the Revolution from the oppression and exploitation of earlier times, had almost nothing in common but their history and their suffering. The government was to them a power to be feared and hated. The factors which unite to form a democratic society—communication, consciousness of kind, common purposes, and organization for cooperation¹⁶—were totally lacking, and the Revolutionary leaders, permeated with the life and literature of democratic peoples the world over, realized that the future Mexico must be the product of conscious planning and action. The masses, to be able and fit to enjoy their new-found freedom in a new-type nation, must be prepared for it, and an education that would create and develop personal interest in social relationships for the common good was seen to be the answer to their problem.

The old education, however, would not do. The "people" had seen the results of that education and connected it, quite rightfully, with the government, hating and fearing the educated man the same way they hated and feared the policeman, the lawyer, and the judge. Public opinion had to be moulded to the new idea. The people had to be shown their needs and made to understand and want the advantages of peace in a democracy. Rather than democracy in education, or democracy and education, linkages so frequently encountered in our own educational parlance, Mexico today stands for democracy *through* education. And the Revolutionary leaders, who are at the same time the political and educational leaders, are making it the business of the central government to spread democratic principles and practices throughout the republic.

¹⁶ Giddings, F. H., *Principles of Sociology*, Macmillan, 1896, p. 114 ff.

The instrument through whose aid Dewey's "social efficiency" is to be produced is the school. It must be a miniature community affording a genuinely social medium, and learning in school must be continuous with learning out of school.¹⁷ The same essential attitudes and practices must obtain in both the school and the community, the main difference being that the school must simplify and order the factors of the attitudes desired, purify and idealize the existing social customs, and create a wider and better balanced environment than the pupils themselves could create.¹⁸ In contrast with the old negative virtues of obedience, docility, and submission, Dewey stands for interest, effort, originality, and initiative. Learning by doing is the epitomized statement of the process. Knowledge and use must be developed simultaneously. Education must be, not preparation for life, but life itself. It must involve not merely "learning" but play, construction, use of tools, contact with nature, self-expression, and activity, and insists upon a psychological study of the child in order that the instruction may be made to conform to his developing powers.

The revolutionary doctrines of the Mexican Federal Government are also being disseminated through this instrument of society—the school. And in the nearly 6500 rural and other schools maintained by the Department of Public Education throughout the country, the school is really a miniature community. This is especially so in the case of the rural school, for the rural community is fundamentally a simple organization and is rather easy to duplicate in miniature. The "activity school," however, has been adopted by the Department as the "official school." The project method of instruction has also been officially adopted in these schools and although its successful operation may undoubtedly be questioned in many instances, it gives promise of remarkable results when more teachers shall have been trained in its use. "Motivation, respect for personality, self-expression,

¹⁷ Dewey, J., *Democracy and Education*, Macmillan, 1916, p. 416.

¹⁸ *Ibid.*, p. 27.

vitalization of school work, project method, learning by doing, democracy in education—all of Dewey is there. Not, indeed, as an accomplished fact, but certainly as a poignant tendency.”¹⁹

We return now to the ideals of an educational system, as set up by Dr. I. L. Kandel.²⁰ The Mexican Federal Government is determined to make education universal and efficient. Children and adults alike receive instruction in the vast majority of the federal schools and slowly but surely the schools of the several states are beginning to follow the lead of the national system. Public opinion is growing more and more favorable, particularly in the rural districts, to the new education; parents are sending their children to school instead of abetting truancy, and in the evening many of these parents attend school themselves. Because of financial stringency it is impossible to accommodate all of those who would attend, but the number of schools is being steadily increased and several “shifts” are operated in many schools of Mexico City. Marked progress is being achieved toward developing a consciousness of Mexican nationality and a desire for self- and societal betterment.

As previously stated provision is being made for equality of opportunity commensurate with the ability and capacity of the individual. The Indian and the mestizo are accorded the same treatment as the Spaniard or the Creole. Special schools and classes are conducted in Mexico City for the deaf, the dumb, the blind, and the lame.

Each individual is stimulated and helped, through scholarships and loans to the worthy, to continue in school as long as his ability warrants. Owing to the fact that 80 per cent of the population were totally illiterate in 1924, the elementary school is the most important element in the educational program and the need for extensive higher education is still negligible. Secondary schools comparable with our Junior High organizations, however, are being established in Mexico City as the necessity arises. The system of standardization

¹⁹ Sáenz, M., *Integration through Education*, in *Some Mexican Problems*, University of Chicago Press, 1926, p. 78.

²⁰ *Op. cit.*, pp. 60-61.

and accrediting, described in the chapter on secondary education, is spreading the secondary movement throughout the republic.

Mexican education, as extended by the Federal Department of Public Education, is predominantly of a vocational nature. Intellectual development is not slighted, but training along vocational lines is stressed from the first grade. Provision is also made for the training of character and personality, considerable emphasis being laid on mutual rights, duties and obligations, social practices and interests and other factors of real present-day life in the community. Text book material is decidedly secondary in the "activity school." Real and worthwhile problems of everyday community living are the main essence of the activities performed. Books and other forms of literature in keeping with the abilities and interests of the pupils are made available in the school and public libraries in constantly increasing numbers, and the work of the school makes absolutely necessary the frequent use of these volumes.

In all federal schools physical education is accorded a prominent place on the program. Athletics and organized games in which all pupils must participate are the basic foundations of the health program the government is carrying out in its determination to improve the typical Mexican and consequently the nation as a whole.

CHAPTER XII

CONCLUSIONS

In regard to aims, methods, subject matter, teacher training, supervision, standardized tests and measurements, ability grouping, extra-curricular activities, community relationships, vocational guidance and education—educational philosophy in general—the federal schools of Mexico are seen to be functioning examples of the most advanced principles and practices. The present study of the Mexican national educational program bears out the judgment of Dr. I. L. Kandel¹ that, of the vast number of educational experiments being conducted throughout the world, none is more far-reaching and interesting than Mexico's.

By concentrating on the enlightenment of the great rural masses the revolutionary governments have demonstrated their sound democratic principles and their faith in the latent potentialities of their country. The astonishing development of the rural school system has proven beyond any doubt the willingness and eagerness of the rural classes to take advantage of their educational opportunities. In like fashion, the evolution of the "circuit schools," established and supported by the communities themselves, has shown that, once awakened to their needs, these same rural folk are ready to shoulder their share of the responsibility for group progress.

The ability of the Mexican Indian to profit by education to the point of equaling, and in many cases excelling, the scholastic achievements of their countrymen, has been clearly demonstrated through extensive experimentation under the direction and supervision of Mexico's most eminent students of human psychology. The revival of the ancient arts in the open-air schools of painting and sculpture, and in the making of rugs, pottery, and basketry in the rural schools, has revealed the striking talent of the Indian in things artistic and shown him to possess initiative and originality to a high degree. Given the advantages and conveniences of modern civil-

¹ Educational Reform in Mexico, in *Essays in Comparative Education*, Bureau of Publications, Teachers College, Columbia University, 1930, p. 163.

ization, these descendants of the great indigenous races of Pre-Cortesian days—about half of the total population—can and will do their part in making Mexico a powerful and intelligent nation.

The social motive now dominating educational theory and practice is particularly active in Mexican schools. Unquestionably, the outstanding feature of the federal educational program is the intimate relation that exists between the school and the community. In the rural school system this relation amounts to the almost complete coincidence of the two elements. Democracy pertains to all aspects of social life, and Mexican leaders have realized that if the school is to be democratic, all phases and institutions of social living must be made democratic. The major problem, therefore, is not to provide a certain kind of school for the children, but to provide a certain kind of environment for the school. The federal educational program calls for the greatest development of the school child and his adaptation to a changing environment, this in turn demanding that the community as a whole—government, industry, parents and teachers—unite and work for its continuous betterment in all its various aspects. And this is precisely what is being done. Night classes are held in the rural school for the benefit of the adults and in addition to the usual instruction, questions relating to problems of national and local interest are discussed. Cooperative organizations are formed and numerous community projects are executed by the combined efforts of both school children and townspeople. Common examples of these group enterprises are the disposal of sewage and waste, the provision of filtered water for drinking purposes, the irrigation of lands, the erection of a school building, the construction of roads and streets, the provision of telephone connections with neighboring towns, and the establishment of mail service. Not the least important of the benefits derived from these conveniences of modern civilization is the improvement of sanitary conditions in general and the resultant decrease in epidemic diseases which for so many years have constituted a retarding force in Mexican life.

In instituting athletic sports and games in all schools as an essential requisite for the making of a worthy citizen, the Department of Public Education has exhibited more wisdom and foresight than is immediately evident. For years and years the Mexican peon has been most wretchedly addicted to the consumption of an alcoholic beverage known as "pulque." After a short period of excessive stimulation by this intoxicant, the drinker is left in a state of sullen, nervous unsteadiness that is mental as well as physical. Millions of acres are given over to the production of the plant (maguey) from which this liquor is obtained practically "ready to drink," since only 24 hours are required for fermentation; and the fact that it must be drunk within 24 hours thereafter or else grow stale and useless, is ample reason to the average peon for imbibing unbelievable quantities. Now, school sports in rural communities generally mean community sports. Old and young take part, and an unsteady eye or a trembling hand militates strongly against athletic victory—a goal as desirable in Mexico as anywhere. As a consequence, it is being learned experientially that "pulque" and success in sports are incompatible, and the active propaganda for physical and mental soundness is gradually winning converts from the vice of drink to the virtues of healthy citizenship.

The process is necessarily a slow one. Prohibition of the "pulque" traffic would deprive the federal government of an enormous amount of revenue which it sorely needs just now. However, some other source of revenue—such as a poll or an income tax or a tax on sales—could surely be determined upon to replace the income thus obtained, and the cultivation of the "maguey" fields could be made equally productive by employing the plant in the manufacture of rope and twine. It is not at all improbable that other valuable products could be obtained from its fibres, namely: roofing, carpeting, and wood pulp.

The introduction of vocational guidance and education in the Mexican federal schools, and as a requirement on the secondary level, marks another striking departure from tradi-

tional theory and practice in Latin-American countries, where for centuries manual labor has been viewed askance by the upper classes. Vast resources, hitherto either untouched or exploited chiefly by foreigners, are soon to be drawn upon by the Mexicans themselves, and they must be prepared to meet their opportunities with intelligence and skill. Through the technical schools and the universities, men and women are receiving instruction and training along occupational lines of the most varied character. Agricultural knowledge and training is the essence of the rural school offering, and the nationwide extension of improved methods of cultivation, use of modern implements, and information pertaining to the most appropriate crops and industries for the different regions, is laying a firm foundation for future economic independence.

Another noteworthy point in the educational reform being carried out by the Mexican federal government is the success achieved in extending its influence to the school systems of the several states. Through the vigorous activity of the directors of federal education in the states, the local governments are gradually being aroused to action. More and more they are becoming alive to the educational needs of their citizens and are allotting constantly increasing sums for public school maintenance. Furthermore, federal theory and practice are being increasingly adopted in state institutions. This, together with the adoption by the federal Department of Public Education of a uniform salary scale, with legally regulated provisions for promotion, tenure, and retirement applicable to both federal and state teachers, has already done much to attract growing numbers of desirable men and women to the service, and to make teaching a real profession.

In order that a future political change shall not bring with it a corresponding change in educational policy, all discussion of a political nature is prohibited in the federal schools and every effort is made to instil in the minds of the pupils and their parents the idea that the school is the key to social, economic, and spiritual well-being and progress. If there is a continuation of the successes that have attended federal edu-

cational activities so far—and the outlook seems very favorable—future generations in Mexico will have learned to rely on the orderly processes of intelligent cooperation for the attainment of national peace and progress. Since the overwhelming majority of the population was illiterate when the federal government was vested with the power to extend its educational program to the whole nation, and in view of the fact that this great majority was almost completely rural, the achievement of a functional democracy made the education of the rural masses the most imperative need. The rural school movement was launched and continued with a zeal and a thoroughness that have aroused admiration and wonder at its successes. Naturally, the “activity school” was the one best fitted to the immediate needs of the country, both for the rural and mountainous regions and for the working classes of the cities and towns (elementary level): the people and their environment demanded a type of school that would be more vital and real than the traditional “recitation” organization.

Today, this “activity” program has proved its worth and is slowly gaining ground outside the federal field of educational action. But in the years that have transpired since its adoption, thousands of rural children have taken advantage of its offering and are now ready for a higher type of instruction than is made accessible to them. The Rural Normal Schools take care of a small percentage of this growing number, but it is now time for the addition of more years to the regular four which constitute the scope of the rural school proper. Either that, or the establishment of Rural High Schools conveniently located to permit attendance of pupils from several villages and towns. Such schools could be conducted like the “circuit” organizations, the communities providing the buildings and the federal government furnishing the teachers and the equipment. Through the agency of these rural high schools the deficiency of the lower rural schools in providing adequate command of the fundamental processes and a background of general knowledge and culture, could be overcome and the foundations of an intelligent democracy would be considerably strengthened.

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